The Social Organization of the Scottish Fisheries.

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I declare that the work in this thesis has been composed by myself, and that the work involved in its preparation is entirely my own.

Abstract.

Key words: Scottish Fisheries, fisheries' history, social-economic organization, small scale production, share ownership of fishing boats, share distribution of income, orientations to work, multifaceted orientation, community, tradition, common fisheries policy.

This thesis concentrates on the question of the dominance of the harvesting sector of the Scottish Fisheries by fisher owned boats and the absence of company fleets of vessels. There are basically two approaches to fisher ownership of boats in the Scottish Fisheries; one sees it as based on local community, the other as a traditional form. This thesis takes issue with these views arguing that this social organization of fishing boats is strong and dynamic and is more in tune with developments in the wider, contemporary, world than it being either one founded on small communities or on a traditional, moribund, form.

Given the key role of fishers in sustaining the social organization, the orientations approach is used to focus on their attitudes within a context of perceived occupational opportunities and organizational options and to ground their reports within a wider theoretical and evidential framework. The approach is used to show that the fishers of this study have a multifaceted orientation to fishing and report a greater and more extensive availability therein of features found wanted, but not obtained, of work in the orientations and other studies of other types of work. This increases these fishers' commitment and motivation to fishing and its social organization.

It is hypothesized that the social organization of the harvesting sector of the Scottish Fisheries is explained by the specific praxis of fishing elusive species at sea. The fishers' orientation and the nature of their labour inputs optimally fits this kind of fishing. The situation of fisher owned boats, a more consultative command style and the share distribution of income which befits the shared risks elicits commitment from fishers more readily than centralized shore ownership and control of boats and a wage system possibly could. The social organization is also explained by the wider social network within which it is embedded and which takes the explanation well outwith the confines of a small community. Indeed, the main problem currently facing the fisheries is not that of traditional moribundity but that of how to accommodate the dynamism of a social organization which has generated extensive vessel, technological and skill development to the ecological context of fishing without imposing restrictions on improving fishing safety and efficiency. Neither free market economics nor increasingly restrictive quota regimes will provide the solution to this problem.

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"Vast sea, forever virgin and forever ploughed [a] religion with the night! It washes and feeds us in its... furrows, frees us and holds us upright. Each wave brings its promise..."

Albert Camus. (1953)

Dedicated to 鎌田末子.

Contents.

Chapter 1. Introduction.

The Scottish Fisheries can be conveniently divided into three sectors; the harvesting, the fish selling and the fish processing and buying sectors. This thesis is focused on the question of the social-economic organization of the harvesting sector, of the fishing vessels and crews in Scotland, and will consider the other two only insofar as they illuminate that question.

The thesis begins, in chapter 2, by examining the history of the Scottish Fisheries to detail the principle varieties of social organization that have existed in the harvesting sector and their dissimilar paths of development and progress (or lack). There have have been three principle forms of social organization in the harvesting sector of the Scottish Fisheries. One was where the boats were owned by the laird of the area and were 'rented' to the fishers, another was where fleets of boats were owned by shore companies and the fishers were paid a wage. The histories of the Scottish Fisheries indicate that the most resilient and dynamic form was the one where the boats were controlled and principally owned by the fishers and the income from the trip was distributed by some mode of equal share amongst fishers and owners.[1]

In chapter 3, using data obtained from the Registrar of Shipping and Seamen, the technical and productive composition and the structure of ownership of fishing boats, at the time of the study, will be examined, detailing whether the boats were owned wholly or in share by companies or individuals. It will be shown that the fleet based on the West Coast of Scotland was composed of more small than mid-range to large boats and that the converse

was true for the fleet located on the East of Scotland. This technical and capital composition was reflected in the catches landed in their respective ports with the largest volume, in terms of both monetary value and weight, landed at East Coast ports, principally Peterhead in North East Scotland. It will be shown also that very few boats, especially in that critical North East coast, were wholly company owned and that most were owned by individuals, in share. The evidence pointed to the Scottish Fisheries being dominated not by many fishing boats owned by a few large companies but by many boats owned by many individuals, largely in share with others.

While the data does not allow the identification of these individuals' occupations it will be argued that supplementary evidence points to them being principally fishers with majority shares in the vessel that they sail on. It seems that where there were non-fishers with shares they were either related to the fishers with shares on the boat or they were the fish selling agents providing services to that vessel. In the latter instance, according to the accounts of all interviewed for this study and to evidence given by both Thompson et al.,(1983) and Deas,(1981) the fish selling agencies mostly have (and prefer to have) small minority shares in these boats and charge 5% of the gross catch revenue for the services they provided. The structure of fishing boats and their ownership in Scotland indicated here then is one of fishing boats owned in share amongst many individuals with the majority share owners being fishers on the vessel they sail on.

Both the history of the development of the harvesting sector and the analysis of the current structure of fishing vessel ownership reveal that the development and ownership structure of the harvesting sector of the Scottish Fisheries contradict the predictions of most social theories. While there is ambiguity in the data provided by the Registrar regarding the occupations of these individuals there is no ambiguity in that the ownership structure contradicts that structure of social organization and

ownership which most social theories anticipated as ensuing from, and predominating through, expanding efficiency of any market oriented economic sector. This thesis will be concerned with explaining this lack of large company ownership of many fishing boats in Scotland.

There are a number of studies of the fishery in Scotland which provide useful background information, e.g., Deas 1981, Gray 1978, Shackleton 1986, Thompson et al.,1983, 1962, Wise 1984, all provide valuable historical and/or overall structural data on the fishery which will be called upon and engaged with at various points in the text, or specific information on small fishing ports, e.g., Byron (1986) on Burra, Cohen (1987) on Whalsay, both in the Shetland Islands, and Knipe (1984) on Gamrie in the Murray Firth. The latter studies, however, are anthropological ones which do not consider the multiple fisher ownership of individual boats, as opposed to individual ownership of multiple fishing boats, a problem to be addressed. While they do give consideration to the operations of fishers, fishing boats and the fishery in Scotland within the EEC they are, however, first and foremost community studies and only secondly fishing studies. For example:

> "My concern throughout the research and in this book has not been with the fishery per se but with its role in the community: with its embeddedness in and influence on culture and social relations." (Cohen 1987 p.145)

These writers, however, find it impossible to specify the boundary integrity of the community and the social homogeneity of the people to whose activities they ascribe dependency on 'community'. They attempt to distinguish community from the outside world through an internal = traditional, external = modern opposition, with the community composed of the former and adopting change when it is seen as an unavoidable imposition of the modern world. Curiously, Cohen utilizes postmodern social theory for his analysis. Thus while treating the community as a text open to multiple readings he deploys categories, e.g., tradition and modernity, out of whose critical negation postmodern theory

emerged. How can it be possible to use theories that describe modernity as a failed project and the world as a fractured mosaic and then ascribe modernity the casual agent which has imposed a homogeneous development pattern on the 'periphery'? Both Byron and Cohen think each community's boundary is being eroded by improved communication, strange for 'communities' based on fishers who fish observantly among other fishers at sea and land catches in other ports and which have been subject to immigration and the post-1970s oil boom. Nevertheless, 'community' remains first cause in their analysis and Cohen, arguing that the fishery in Whalsay emerged from a period of crisis, uncertain volatility and self-doubt in an optimistic and expansionist mood, goes so far as to say:

> "Whether this prompted, or resulted from, an upturn in the fortunes of the fishery has to remain a matter of speculation, My inclination is to the former: a community reaches a depth of uncertainty and crisis at which it somehow recognizes that it has either to assert itself in vigorous positive action or to 'go under'.... Whalsay becomes Centre and everywhere across its boundary Periphery." (1987 pp.152,167)

Yet, as will be shown in Chapter 2, the expansion to which Cohen attributes cause to the Whalsay community was being pursued equally vigorously in the fishery in the North East of Scotland. In that sense, there would seem to be something common to both which explains the expansion and the social organization that takes analysis beyond the confines of a small community with frail boundaries and which, in most instances in the analysis of Byron and Cohen, is portrayed as relatively powerless and buffeted into making unwelcome changes by the political, economic and technological impact of the 'modern' world of Britain and the EEC.

Interestingly, Byron, Cohen and Knipe found that the boats in their ports of study were all fisher, principally crew, owned and that the vessel's income was distributed amongst the owners and crew equitably using the share system. Byron and Cohen also found that their skippers were consultative in their command style; that, forby this, the skipper was most responsible for their fishing success; that all of the crew worked together at

tasks more according to necessity than job description; that their crews were flexible, self-motivated, coordinated and diligent in their work; that there was usually more than one qualified skipper on any boat; that they strove for success in their fishing and closely monitored and evaluated other boats' fishing practices and new technologies; etc. While they tend to attribute some of these aspects, such as an emphasis on equality and consultative command styles, to the influence of community values on the fisher, it will be argued here that this is not their primary cause.

Here it will be argued that such qualities are not unique to the fishers in these small communities. These findings concerning the operation of the boats are in line with those of other studies of fisher owned boats throughout the North Atlantic,(c.f., Acheson 1982, Binkley 1990, Norr and Norr 1978, Gatewood and McCay 1988, 1990, Wadel 1972, for example) and with those of the fishers and others interviewed for this study. This thesis will argue that the specific praxis of fishing, the contrasts in the experience of fishing, within its current form of social organization, and the alternative occupational opportunities, with their very dissimilar social organizations and work experiences points to a very different explanation of the social organization of the fisheries and its recent development. This, along with the wider social network within which it is embedded, rather than local community, will be advanced as providing a more fruitful hypothesis to explain the Scottish fishery's social organization.

Explaining the Social Organization of the Harvesting Sector.

To provide a hypothesis to answer the question of the lack of large companies owning sizeable fleets of fishing vessels in Scotland it is prudent to examine the most developed part of the Scottish fisheries, in terms of a, number, structural composition and technical development of craft, b, the proportional value and weight of fish landed and c, onshore integrated companies

and organizations, as this would be the most likely place for such companies to emerge and exist. Given the crucial location of the fishers in developing and sustaining the current organization the orientations to work approach was utilized and expanded on to focus more sharply on them within a context of perceived opportunities and organizational options.

The origins of the orientations approach lay in the Marxist attempt to explain social consciousness by reference to a persons' location in the world of productive activity. The approach addressed the problem of trying to explain people's orientation to their productive activity by treating them as intentional actors and attempting to access their evaluations of that activity.(e.g., Blackburn and Mann 1979, Chinoy 1955, Dubin 1956, Goldthorpe et al., 1968, Gouldner 1954, Prandy et al.,1982)

The orientations approach facilitates focusing on the fishers' perceptions, expectations, preferences, satisfactions, dissatisfactions, career ambitions and understandings of the fishery as it was organized. Also, it is possible to do this in a structured and comparative way; e.g., fishers assessment both of the fishery, as it was socially organized, and of the alternative available occupations, as they were socially organized, can be elicited. The approach offers the opportunity to highlight the fishers as competent social actors with an understanding of the social and ecological environment within which they operate, with some success, and to tap into their perceptions and understandings of that environment and of the role of the companies and other institutions that they are in some way connected with.

Simultaneously, it will be possible to ground the fishers' reports in the developments and findings of the orientations studies. The fishers interviewed reported that the current social organization of the fishery expanded the availability of features found to be sought, if not obtained, of a work situation and which increased the satisfaction from, commitment and motivation to, the work and organization perceived to be providing them in greater

quantities by these studies. Such a grounding of their reports can be contextualized within the reports of satisfaction and other studies conducted on fishers elsewhere in the world (e.g., Acheson 1981, Anderson 1980, Apostle et al.,1985, Binkley and Thiessen 1990, Gatewood and McCay 1990, Norr and Norr 1978, Pollnac and Poggie jr., 1988, Sinclair 1985, Thompson et al., 1983, Tunstall 1962) which tend to show that fishers get more satisfaction from and prefer working on boats that are fisher owned and operated to boats owned in fleets by non-fisher, shore based companies. In consequence it can be said that these fishers are more strongly committed to the fishery, as it was organized, and that this helps to explain the strength and dynamism of that social organization.

This thesis will extend the following hypothesis regarding the explanation of the social organization predominant in the Scottish Fisheries at the time of the study, 1986-1989. Evidence for this explanation is principally provided by the responses to extensive interviews conducted with 40 fishers in the North East of Scotland in that period, by interviews conducted with a number of officials and people connected with that fishery, by the findings of other studies of fishing in Scotland and elsewhere and by the findings of studies of work.

The social organization of the Scottish Fisheries is partly explained by the nature of the activity of harvesting fish at sea. The location of the fish in the vast, changing and dangerous sea, their inadequately known reproduction and migratory patterns along with the varying intensity of demands of working aboard a fishing vessel compose an inconstant undertaking. This is best executed by a crew who is more independent, adventurous, skilled, coordinated and flexibly responsive in temporally and physically applying themselves to fishing. However, these aspects which make for an optimally efficient crew are not spontaneously provided by those who work as fishers under any or all of the circumstances of fishing. The social organization of fishing is itself a crucial factor influencing the crew in this. The social organization of

fishing, whereby the boat is owned and controlled by the fishers who operate that boat in share and the income is divided amongst all the boat's crew and owners by the share system, elicits these aspects which make for more efficient and effective fishing from a crew better than a system of shore company ownership where the crew are paid a wage for their work. This social organization, its more informal and open command structure and the occupational identity of fishing elicits these aspects from the fishers better than centralized ownership with its hierarchical, formal and rationalized command structure. This contrast contributes to explaining the persistence and vitality of the social organization predominant in the Scottish Fisheries.

Both the fishers and those connected with the industry who normally would be most expected to sponsor concentration will be argued to be aware of the particularities of fishing practice. The fishers interviewed attributed their success to their skill locating and harvesting the fish and they were unwilling to assume the responsibility for owning vessels over which they conceived that they have very little or no control. Furthermore, they were reluctant to work either with or for someone else whom they suspected of attempting to control their fishing practice and/or vessel's operations, maintenance and renewal. It will be argued that those ashore who are associated with the fisheries and who would normally be expected to be the main source of centralization of ownership of fishing boats have a similar view of the need for detailed information of, and control over, the fishing activity of a vessel to ensure its success. That they are aware, of the difficulty of obtaining the information needed to implement such control and of the intransigent independent attitude of the fishers. Moreover, the attitude of both the fishers and those connected with the fisheries expected to sponsor concentration to centralize ownership and control of a multi-vessel fleet are coloured unfavourably by the earlier lethargy and failure of the shore company owned trawl fleets.

The actual characteristics of harvesting fish at sea also contributes to making fishing a more interesting and attractive occupation. These characteristics contribute to making fishing a more varied and expansively endowed activity in terms of aspects which tended to be found in studies of work to increase the satisfaction and interest of that work. However, the social organization of the ownership and control of the fishing boats and of the division of the vessels' income either restricts or enhances the availability of aspects which were found to improve the satisfactions obtained from work and the commitment to the work and organization providing these. The social organization predominant in the Scottish Fisheries enhances the availability of the features making it more attractive. This gives the fishers reason to want to remain working at fishing with its current social organization rather than move to another occupation with lesser desired features and quite different social organizations of ownership, income distribution and control of work practices. It gives the fishers further reason to want to, and to work to, retain that social organization and oppose its transformation. In doing so it contributes to the explanation of that organization. The fishers interviewed for this study revealed in their replies that they had a multi-faceted orientation to fishing which was fulfilled more by fishing, as it was organized, than by any other occupational opportunity either experienced or thought possible.

Solution of the problem of the social organization dominant in the Scottish Fisheries lies in the distinctiveness of both the activity and experiences of fishing, especially as the social organization itself effects these. It lies in the way that the activity and experiences contrasts with alternative kinds of productive activity, especially as that is dissimilarly organized. It lies in how that dissimilar organization effects the activity, and the experience of it, and offers a contrasting and possible alternative form of social organization to that predominant in the fisheries. In this sense the explanation begins to refer to the

wider social context of fishing and its social organization.

A fishing boat is a socially located enterprise whose strength of organization partly derives from the social network within which it is integrated and the social development of scientific knowledge which enhances its capacity to fish efficiently and safely. While the appearance of a fishing boat is of a sole vessel fighting the sea and the fishers often perceive themselves as highly individualistic they are, in fact, socially located and are dependent on the extensive social relationships within which the social organization is located. These are the social relationships concerning the provision of infrastructure, e.g., ports, transport networks, navigation and safety systems, etc. These are the relationships that the fishers have with fish selling agencies, (who are interjacent between them and fish buyers, e.g., fish processors, etc.,) the banks the financial supporters, the fish producer organizations, etc. It is argued that these specific relationships are favourable to the current social organization of the fisheries. This is especially so and important with the ones with the fish selling agents which helps distance the fishers from the buyers, principally the fish processors. These social relationships will be argued to contribute to the persistence and vitality of the social organization of Scottish fishing boats.

This thesis will focus on and argue that the specific nature and experience of fishing itself, especially as they contrast with those of the available alternatives and are enhanced by the social organization prevalent in the Scottish Fisheries, and the specific nature and quality of the network of social relations within which the social organization is located offers an explanation for the social organization of ownership and control which predominates in the Scottish Fisheries. Such contrasts and experiences accord more with the orientations of the fishers committing them to fishing and its social organization more than the available alternatives. The survival and prosperity of their social organization partly depends on the nature of the network of social relationships that

they are grounded in and on the social development of knowledge. This is knowledge of fish stock levels, reproduction and migratory patterns, of the means to ensure an efficient, safe and balanced harvesting of species, of navigation technologies, etc. The social location of the social organization predominant in the Scottish Fisheries extends and delineates some areas of their freedom as a social unit and helps explain it. The social location of the organization does this as well as offering contrasts in the nature of the production methods and requirements and the experience of these by both fishers and outside observers. Together, contrasts in the nature and experience of fishing as it is organized and the social relationships that the social organization is situated in, and/or integrated with, explains its vitality and persistence.

This is the hypothesized explanation which is guiding the chapter structure of the thesis. That structure is as follows:

Chapter 4 will explain the reason for selecting Peterhead as the site for the location of the fieldwork while providing a sketch of the history of Peterhead. It is argued that Peterhead is ideal for the fieldwork because it is the largest fishing port in Scotland, indeed in Europe, and that all kinds of fishing boat practicing all of the kinds of fishing methods found in the Scottish Fisheries can be found there. Also, Peterhead has a long, history of association with fishing and fish landings, in terms of value, were showing secular growth in Peterhead. All of this makes it ideal for examining the social organization of the most important part of the fishing fleet in Scotland.

This chapter will also report on the size and structure of the sample and what was learned of the fishery from the problems encountered in obtaining contact with fisher respondents. The number of fishers interviewed was forty. While this is quite small, it is not debilitating as the emphasis is on qualitative, rather than quantitative, analysis of their replies.

Chapter 5 examines the study's fisher respondent's manner of entering the fisheries and their perceptions of the range of

occupational opportunity open to them at that time. The subjects' remembered perceptions of, and reasons for making, their first career choice are examined. This revealed their recruitment into the fisheries was by informal procedures, through personal and casual contacts, rather than by formal procedures of application, interview, etc. While most had some hands-on experience of fishing prior to their leaving school and becoming fishers and had fathers and/or some other relatives who were fishers few had relatives on the first boat that they sailed on. Their replies suggest this social background and experience fostered in them a positive view of fishing. Having this social background and prior experience did not, however, result in all of them becoming fishers immediately upon leaving school. The reasons that they gave for not doing so indicates that they and/or their relatives perceived the fisheries as marked by fluctuation in its fortunes. This led some to enter other occupations prior to entering fishing to provide insurance against severe difficulty in fishing. Few, though, completed their training; probably their desire to become fishers was stronger.

While most thought the range of occupational opportunity open to them when they left school was constrained they also thought that for them to enter fishing was equally or more constrained. When the opportunity to enter fishing became available they took it immediately. Those who had taken some alternate job, usually abandoned their initial plans to get some other work experience and training at the cost of constricting their future range of opportunity. Of those who had no intention of becoming fishers on leaving school three had not come from a fishing background; they became fishers late in life. Most of the subjects' perceptions of the range of opportunity open to them when they were leaving school were that it was constrained. They were more concerned, however, that their opportunity to enter fishing was equally, if not more constrained.

In chapter 6 the orientations literature is reviewed in detail to elicit theoretical development within it and some common

findings of the different studies which help explain the subjects' preference for the fisheries as it was socially organized. On the basis of the review, of the findings of other studies of fishing and of the fisher subjects' replies in their interviews, a multifaceted orientation to the fisheries is sketched for explication through detailed analysis of these fishers' replies. It is argued that these fishers' commitment to fishing and its social organization is explained, not by any single factor obtained from fishing, but by a number of such factors together. While some of these are available in fishing regardless of the social organization most are not. Of those that are available, the social organization revailing in the Scottish Fisheries significantly enhances and enriches their availability.

A hypothesized explanation of the social organization of the harvesting sector of the Scottish Fisheries, whereby individual boats are predominantly owned by multiple owners, rather than multiple boats owned by individual owners will lastly be advanced.

In chapter 7 what is important of fishing for the fisher subjects' is examined through analyzing their likes and dislikes of fishing. This illuminated their multifaceted orientation and areas of correspondence with the findings of the orientations studies regarding aspects that people want of, or that brought them satisfaction from, their work activity. It is argued, on the basis of the responses to the interview schedule of the fishers interviewed, of the studies showing the skill and flexibly responsive labour requirements of fishing and the job satisfaction studies of other fisheries, that the current social organization avails more of aspects that the orientations studies found wanted, but not obtained, of work. It is argued that the social organization avails more of aspects that they found brought improved satisfaction and commitment and motivation to the form of that activity providing them. Further, it is argued that, as well as continuous features, there are discontinuous features of the occupational identity of fishing which distinguishes it from other

available occupations. Both continuous and discontinuous features constitute what is important for these fishers of fishing and contribute to explaining their commitment to, and, thereby the resilience of the social organization of the Scottish Fisheries.

In the orientations studies consideration was given to what was termed 'revealed preference'.[2] This was defined as what was expressed by the studies' subjects simply by their remaining in their current employment position. In chapter 8 it is stressed that the temporal pattern of the subjects' past and present employment reveals a preference for fishing which is explained in their expressed preferences. Both their revealed and expressed preferences favour fishing and its social organization.

In chapter 9 the fisher respondents' assessments of any previous occupational experience other than fishing, of factory and office work and their preference from amongst all of these and the fisheries is examined. These assessments and preferences further express their multifaceted orientation, confirming and illuminating their preference for fishing as it was organized.

Chapter 10 focuses on the subjects' appraisals of the system of income distribution practiced in, and the social organization of, the fisheries. Some fisheries studies contend that small scale fishers are the subject of self-exploitation. The fisher subjects were asked to assess the incomes that they obtained from fishing and give their appraisal of the fairness and efficacy of the share system for distributing the vessel's income and for the the operation and reproduction of both their vessel, specifically, and the Scottish Fisheries, generally. This revealed that they thought that the income that they obtained and had obtained from fishing, despite it fluctuating between trips and over time, was very good. They were proud of their achievements and had no perception of having been underpaid and overworked.[3] This also revealed that all of the respondents thought the share system was very fair and efficacious both in distributing the boat's income amongst the crew and owners and for the operation and reproduction

of both their vessel and the Scottish Fisheries generally; all of the respondents thought that the share system was fairer and more efficacious in this than any form of wage system had been or could possibly be. Against the argument of self-exploitation the share system is argued here to have both generally provided the fishers a good income and contextualized the joint risks they faced and efforts they made in their fishing within a framework of shared return. It is argued that it does this in a way that enhances the crews' effectiveness in, and experience of, fishing.

Both fishers who owned, and those with ambitions to own shares in a fishing boat were asked the extent of their ambitions for future share ownership and to explain these ambitions. By and large, the extent of existing, and the ambition for future, share ownership amongst the respondents was limited to one or, at most, two boats. Extending share ownership beyond this was acceptable only to assist another, younger, fisher become established as an independent vessel or share owner.

Those without shares in a boat, and who reported no wish to obtain shares in the future, explained that this was because they felt that the responsibility of being a share owner, especially a skipper share owner, was excessive. The reason those owning shares gave for either not wanting more shares in any more vessels or limiting this ambition to shares in another boat was that they needed to be able to control or influence the daily operation of that vessel. Without either being on the boat or fishing jointly with it they thought that their ability to control or influence its fishing operation was unacceptably constrained because they attributed their success to their ability to exert such control or influence. The respondents indicated that they thought the Scottish Fisheries had become increasingly successful due to the fisher ownership and control of the fishing boats. Further, their explanations for the efficacy of the operation of the share payment system and the limitation of their share ownership ambitions contained strong enmity to any large, shore based,

company ownership of, and/or involvement in, the fishing boats. The replies in this chapter revealed strong support among those interviewed for small scale, fisher, ownership of the boats as providing the optimal social organization for the fisheries.

Chapter 11, examines the stepped extension of the Economic Exclusion Zones and the emergence and current effect of fishing regulations. The emergence, practice and many of the problems associated with these regulations are all international. The EEC common fisheries policy is only a specific expression and part of the international nature of fisheries regulation. Some attention is given to the development of the methods employed to conserve fish stocks and sustain a developing, safe and viable fisheries. The availability of grants and loans assisted the fishers in the fisher owned fleet in the Scottish Fisheries develop the safety and fishing capacities of their boats. This is quite proper, given that it assists the creation of a safer, more efficient, fishery. However, it is argued here that overall both EEC and British Government policy have tended to have contradictory effects. The recent British Government refusal to introduce the decommissioning grants prerequisite for Scottish Fishers to be eligible for EEC decommissioning grants is a continuation of that contradiction.

Footnotes.

(1) The share system will be detailed, as it was practiced and changed historically, in chapter 2. The way it was practiced at the time of the study can briefly be described as follows: The ownership of the boats was measured and described in sixteenths shares with a majority share usually held by a crew member, most commonly the skipper. The income from each trip was subdivided to the share system at the end of each trip; first, the expenses of the trip, e.g., for items such as harbour fees, fuel, fish boxes, ice and food costs, were taken from the income obtained from the fish sales. The remainder was then divided in two with one half being split equally among all of the crew members participating on the trip, regardless of their post on the boat, and the other being split among the boat owners proportionately to the number of sixteenths of the boat that they owned.
(2) Expressed preferences are the preferences stated and the reasons given for them by respondents in reply to questions asking them to make these assessments.
(3) Both they and the cost and earnings survey estimated the fishers' average income to be at or above the national average at that time, depending on the size of the vessel they were on.

Chapter 2. Fishing Through History in Scotland.

Introduction.

The purpose of this chapter is to examine the history of the Scottish Fisheries. In examining the history of the fishery the focus will be on factors that help explain both the present social organization of production in the fisheries and issues that arose during the interviews with the fishers. The thesis that will be advanced in this chapter is that the history of the Scottish fisheries indicates that social relationships generated by the social organization were influential in generating a more resilient, resourceful and dynamic fishery than the alternative forms of organization that have existed historically in Scotland.

The focus of the examination of the written histories of the Scottish Fisheries will be on: 1.The methods of ownership of the boats and of the fishing gear. 2.The methods of distributing the income. 3.The cyclic tendencies in the industry. 4.The use or marketing of the catch. 5.The development of the vessels and gear. The intention is to locate the analysis of the fishers' understandings and orientations towards the fisheries within a context of historical change within the Scottish Fisheries.

In this chapter it will be shown that the ownership patterns of the fishing boats varied between different parts of Scotland quite early in the fishery's history and that company ownership emerged to dominate for a period. It will also be shown that the share payment system was quite different in its earlier stages than it is at the present. In traveling to the present model the share system has undergone some substantial modifications. Despite these modifications the fundamental principle of the

system has not been abandoned and there is evidence in the written histories that the social relationships between the skippers and crew were, and have remained, more informal and consultative throughout than in any of the alternative social organizations.[1] I will want to build directly on this to suggest that there is historical evidence of the greater effectiveness of the share system in promoting the development of the share owned fleet when comparison is drawn with the methods of payment used by the company owned fleets which went out of business. There is historical evidence of the different paths of development of the company owned trawlers which suggest that after their initial dramatic stages they were less dynamic in their development than the share owned fleet which came to supplant them in importance for the operating and production capacity of the Scottish fleet. It will be contended that the formation of the Economic Exclusion Zones provided the context of the demise of the company owned sector but not the reason for their demise because of evidence of decline that preceded the introduction of the Economic Exclusion Zones. Moreover, the introduction of the zones was fairly long heralded and could not be considered to have taken the companies by surprise.

Fishing History.

The initial form of fishery that was pursued in Scotland was the white fishery. While Malcolm Gray (1979) notes that this fishing, as a principle means of sustenance, was pursued in parts of the East coast of Scotland from at least the 16th century it is, in fact, very likely to have started much earlier. From the late 18th century herring fishery became a major specialism. Gray provides the most detailed account of fishing in Scotland from the late 18th to the early 20th century although his account is marred by the problems that beset economic theory in general. He drew a picture of an east-west divide in the Scottish Fisheries which corresponded with geographical differences in the shore

formation and the availability of productive farm land. The divide was manifest in the practice of occupational pluralism in the West; fishing practiced jointly with subsistence farming and occupational specialism in the East; where fishing was practiced as the sole productive activity and the fishing and farming communities were distinct. The latter disdained the former who lived separately and mostly recruited only internally. This distinction between fishing and farming in the East continued, by and large, through to the present. Fishing was also practiced in the Shetlands but here it was quite unique and more resembled the occupational pluralism and the social relationships of the West, than of the East, coast fishing.

As well as being different in their degree of specialism the fishers in the East were also different in being integrated into a social structure that allowed them greater freedom of action and more opportunity to develop their activities than those in the West. Having specialized in the fisheries early East coast fishers owned their boats and gear among themselves and were able to build on this shared ownership to retain possession of their means of production throughout the 19th century. The share ownership was calculated in sixteenths. Why this should be so is uncertain but it seems logical that it came through constant subdivision; halves, quarters, eighths and sixteenths. Ownership could be of either or of both boats and gear. The income from ownership was calculated according to the portion of ownership. This was the proportioning spoken of and used in the present system of share ownership. The share income in the 18th and 19th centuries was distributed according to the number of crew members participating in the venture. The ownership share equaled one more crew member; if there were 6 crew the income was divided into sevenths. One of the sevenths was divided amongst the owners of the boat and gear according to their ownership proportion. The income is still so divided between the crew and the boat but the proportion ascribed to the boat is now greater than a crew share.

Demersal fishing and pelagic fishing had, and continues to have, their own catching technologies and techniques. White fishing in the 18th and 19th centuries was undertaken initially from open boats and later from decked boats by using lines of baited hooks whose numbers ran up to 3000 on each line. It seems that at this time that households formed the basis for an integrated production unit that was marked by a division of labour: The men fished with boats and lines that were owned in share by the crews and were paid by equal division of the catch for either their labour participation or ownership of the boats and/or the gear.[2] They pursued two fishing seasons; one near shore, day trip fishing and the other a more distant water, 2 to 3 days trip fishing. The women gathered the bait, cleaned and baited the lines with the men whom they may have carried to the boats in the morning when jointly launching the craft due to the lack of ports. The women also gutted, cured and often sold the fis in the farming hinterland,where they were ill thought of, otherwise the fish were sold in local markets. The women's activities were integral to the greater effective independence and freedom of action of these harvesting units on the East Coast.

The early 18th century herring fishers fished from open boats that were used only for this fishery. They caught the fish in drift net that hung like suspended curtains in the water awaiting the fish to swim into them. This was a very fickle type of fishing; boats working side by side could see one struggling, hauling in fully laden nets and the other hauling in nets quite bereft of fish. This method was used until the mid to late 20th century. In the East the boats were owned in share by the fishers and the income distributed by shares of the catch. In the West and the Shetlands the boats were more often owned by non-fishers and the fishers were either employed for a wage or they paid a rent for the use of the craft regardless of the size of catch. Furthermore, the fishers in the West were involved in debt relationships with the landowners or the merchants that they

often found difficult to clear because these were both the monopsonistic buyers of their catch and the monopolistic suppliers of their equipment and provisions. The consequence of this for their living standard was unclear but one thing that was clearer was that the fishers in the East were more dynamic in developing their craft and fishery than those in the West.[3]

The herring fishery burst forth initially on the East coast from the late 18th century cumulating, with some unsteadiness, in an influx of merchants into the Caithness area. These merchants initially bought the herring by negotiating a price for the catch on each landing. This early practice was altered to one where the curers or merchants contracted with the fishers to buy the vessel's catch for the season at a pre-set price up to an agreed limit. When the agreed quantity was reached the price was renegotiated with either the same or a different curer. The fish were mostly pickled in casks with salt and were sold in the West Indies, Ireland and Scotland in that order of importance. From the outset the industry was export oriented and this continued when, from the 1820's, the European continent emerged to become the single most important buyer of herring after some work was done to improve the quality of the cured product. East Europe is again today the single most important herring buyer.

The herring season was initially a very short two month one which supplemented the more important white fishery. Attracted by a business that was expanding into a sizeable affair were boats and their crews from south of the Moray Firth and further and people from the West looking for temporary employment. Throughout the 19th century on much of the East coast the boats became bigger and more expensive as the fishers invested in them to increase their capacity.[4] The development of vessels and techniques took place later and was less dynamic on the West coast and in the Shetlands.

The herring fishery, however, re-ordered the work relations in the households. Nets were no longer made at home but in a factory

and the women were employed by the curers to gut and pack the fish in casks with salt and were less closely involved in working with the men in the harvesting enterprise for the season. Nevertheless, the women's earnings fed into the households and enterprise helping to sustain fisher ownership and development of the boats and equipment. Also, the new fishery introduced a distinction between the share owning and share paid fishers and the supplementary labour, who were usually outsiders, employed for the season and paid a wage for a trip. Outside of the herring season the households remained central to the demersal, line, fishing that the fishers were active in for the biggest part of the year, although some change had begun here too.

The herring fisheries as a major affair spread down the coast, from its initial starting point in Caithness, involving Peterhead from about 1819. This expansion from the early to late 19th century saw more bigger and better boats being built for the fisher who were using more and improved nets and equipment in the East. Accompanying these from the late 1840's there was a tendency to fishing further and further afield and extend the length of the season. This was the start of the great migration of fishers and curers following the herring that eventually took them on a near full circumnavigation of Britain.

Malcolm Gray, the major historian of this development, faces difficulty in explaining its expansion. The fisheries involved the fishers investing in separate, larger craft, used solely for herring fishing for the short season and laid up the remainder of the year. Despite incurring ever expanding investment in boats and nets with the fishers having shares in both in the East, Gray notes, (1975 pp.44-5) the traditional crews were marked by an equality of personal and monetary investment and returns as well as of social standing in their communities. However, he finds difficulty in explaining their participation in the fishery. He argues that average returns were very meagre; that the behaviour of the fish and the performance of the individual vessels were

erratic and that there was no market mechanism of constantly rising prices to fit his generally orthodox economic explanation of the fisheries. Because it was possible for some to make a big catch and income he resorts to a notion of the gamblers instinct to resolve the difficulty of economic theory.[5] However, gambling is inimical with long-term investment. Gambling is conducive with the holding of immediately available, ready cash so that 'cutting one's losses' can quickly be achieved by easily withdrawing from the situation. This is not what the fishers were doing in buying bigger boats year after year that, being only usable for part of the year, were laid up ashore for the largest proportion of it.

Gray is not unique, though, in resorting to externalities to the economic model to explain aberrations from the expectations entailed by that closed model; it is standard practice among economists applying their theories to the explanation of actual economic phenomena. Yet, he continues, after arguing that the cost of investing in the herring fisheries was large and that the numerous small boats participating in it were a fragile foundation for the industry, to say that the growth was due to "...a way of fishing and of curing which was cheap and effective..."(1975 p.106) A better explanation is found in the social organization and social relationships of the fishers in the East. As Gray's own account makes clear the pace and degree of the development of the herring fisheries was not uniform throughout Scotland. The East with their more frequently fisher owned craft based on households, which also acquired income from the women's employment with the fish, and using the share system was more dynamic than either the West or the Shetlands at this time. Never mind, he is satisfied that rising prices provides an orthodox economic explanation for the burgeoning fisheries from the 1830s despite the secular trend being scarred with deep downward fluctuations in the amounts caught and their price.

The white fishing remained of considerable importance to the fishers and had been the dominant part of their activities. The

lengthening of the herring season expanded the range of choice available to them throughout the 19th century. In practice, there was, however, a tendency to an increasing reliance on the herring fishery and a reduction in the time spent on the slightly less erratic white fishery. Both fisheries witnessed, nevertheless, development in the boats and the gear used by the fishers in the East and increases in the cost of these for which the curers or merchants often gave assistance. All the time there was increasing capitalization and some share owning in more than one boat by the fishers in the East for both fisheries, often with different partners for each fishery. Gray says of the East coast fishers in the early 1880s:

> "Effectively, apart from temporary aid, the fishermen were providing the means by which the great accumulation of expensive equipment was acquired. In doing so they retained their independence as share fishermen, moving freely, making the best bargain that they could with the curers, and dividing amongst themselves the full proceeds of the various fishings. They could become, too, people of considerable property: a man might have shares in two or even three boats, together with an appreciable portion of the drifts of nets and of both small- and great-lines which he might use at different times of the year." (1975 pp.99-100)

On the West coast, where people were more closely involved in farming than fishing, the situation was different. This initial primary involvement in farming and secondary interest in fishing, often spurred by similarly divided landlords, makes Thompson et al's talk of a chiliasm of despair somewhat ill-considered and wrong for the Western Isles. While they give a detailed account of some of the historical socio-economic particularities of the Western Isles they conclude that these do not explain the difference of the Western Isles. What does, they claim, is a pervading chiliasm of despair; an overwhelming religious orthodoxy which squashed the Islanders individuality and entrepreneurial spirit into a community stupidity.[6] This ignores the similarity in the development of the West coast and is unwarranted. A more adequate explanation must consider the similarities of the Western Isles and the West and their common differences with the East coast.

There were historical differences in the social structure, activities and interests between the fishing populations of the West and East coasts. Those on the West were from the outset more integrated into and interested in farming and dependent on landowners for capital for fishing and removed from varied outlets for their fish than those on the East. Consequently, when those on the West did begin to participate in the expanding herring fishery it was often at the insistence of the landowners there. Also, due to their earlier more partial participation and interest in the white fisheries, they had fewer resources than those in the East to invest in what had by then become increasingly expensive vessels. Their participation was promoted and facilitated, firstly, by the landowners whose interests, like themselves, had been divided between the land and the sea and to who they were then in a relationship of indebtedness. The fishers were also reliant on these landowners for outlets for their catch and for their chandlery and provisions. It was to them that the fishers either paid rent for the use of the craft or by them were later paid a wage. Later, their participation was facilitated by the curers or merchants who were itinerant visitors for the herring season. The social relationships of their fisheries were quite different in consequence of their different ownership patterns. For the West coast fishers the white fishing remained a more important part of their fishing effort which was only part of their total productive activity. In neither fishery was the experience or interest of either the fishers or the landowners, who prompted them, as strong in the fishery as it was in either farming or estate management. In neither fishery were the fishers able to develop the independence that Gray noted characterized the fisheries in the East and that would have enabled them to participate more fully and dynamically than they did. Consequently there were fewer boats in the West, not just the Western Isles, and they tended to be smaller and less developed. Something similar could be said for the Shetlanders who were

ensnared in their relationships with the landowners in the truck system in the Haf fisheries and then with the merchants thus until the 1880s. Goodlad provides a harrowing account of the Shetlanders continued use of open decked boats that resulted in the loss of all but 3 of nearly 100 boats in a sudden storm when the decked East coast boats, fishing alongside, were largely unscathed. As far as output was concerned the West coast and Shetland fishers were much smaller contributors to the Scottish total than the East coast fishers were and their contribution declined as the East's expanded.(c.f.,Gray,1978, Goodlad 1971)

Nevertheless, from 1884 the uneven 19th century expansion in Scotland entered a deep slump and the system whereby the curers offered a guaranteed price for a pre-agreed quantity of fish reverted to a system of auction at their insistence, despite the protests of the fishers. But, it was soon to be to the fishers advantage when the slump ended and has remained largely so to the present as the salesmen and the fish processors have largely remained at a more comfortable arms length. The slump continued to 1890 when the pattern of irregular growth resumed in the herring fishery until the 1914 collapse of the continental market.

The herring fishery was something of a source of changing social relationships virtually from its inception in its effect on the households on which each vessel was based. It was especially so from the 1890s herring boom. Changes in the form of the introduction of supplementary wage labour, initially, to meet the needs for additional labour for the very short season was one of them. In the West there was the ownership of boats by non-fishers sometimes paying a wage to all their fishers. The women became itinerant labourers employed by the curers. The very technological development that the East coast fishers were pursuing with vigour was to become the focus of a general shift in the centre of the most productive and dynamic sector of the Scottish fleet away from the share sector to a new company owned sector. Accompanying this there was the alteration of the social

relationships characterizing the most important sector of the fishery of the expanding white fishing. Social relationships were then based on the separation of the ownership of the boats and gear from the fishers to shore based companies and the employment of the fishers for a wage.

The innovation which became the focus of these changes was the introduction of the steam drifters at the end of the 19th century and their use in steam trawling. Their much greater purchase cost (Gray estimated this to be at least three times that of a sail boat at the same time. 1975 p.150) and, more importantly, operating costs encouraged their continuous use throughout the year and saw some concentration of ownership in fewer hands. Very significantly, it saw vessel ownership pass to non-fishers in the East and those owned by fishers were usually so only through substantial debt to the banks, fish-salesmen, merchants, curers, etc. Furthermore, where the fishers owned the vessels the share distribution in boats and gear among the fishers was more constricted and less egalitarian. Gray noted:

> "....Yet even in 1911 there were still many sailing boats in full use, and with them more old-fashioned schemes of ownership prevailed; consequently each district had elements of the old egalitarian diffusion of property mixed in with the new and more hierarchical order." (1975 p.158)

For the share fleet the method of calculating the share system was altered; an expenses element was introduced which was deducted prior to the split between the owners and crew. Throughout the history of the Scottish fisheries the share system, where used, was subject of revision and modification. The steam trawlers meant a decline of many of the existing fishing ports and the dramatic expansion of Aberdeen based on the company owned trawl vessels. To some the prophesies of social theory concerning the development of production through its concentration in private ownership seemed to have commenced.

Fishing and the Trawling Businesses; 1880 Downwards to 1945.

It is not easy to discern the situation of the emergence of

the trawler fleets from the written histories of the fisheries of this period because they either contradict themselves or are unclear or are both. One aspect that is certain is that the steam drifters were adapted to be used to trawl for white fish. Line fishing had been the predominant method practiced in the demersal fishing in Scotland until 1882 when trawling was first adopted from England by vessels operating out of Aberdeen. This development transformed Aberdeen: Before 1880 Aberdeen had been nothing of a fishing port with very few home based boats that accounted for little of the fish landings in Scotland. By the 1890s 20% of the Scottish white fish catch was being landed at Aberdeen, primarily by steam trawlers that were day tripping to near waters. Within twenty years vessels from all around the East coast and further afield were attracted by Aberdeen's extensive market which was feeding the many fish processors and curers who had moved themselves there. Speedy rail transport strengthened Aberdeen's appeal as a fishing port.

Some accounts attempt to paint a clear, contrasting, before and after picture. Before the steam drifter the boats were owned by the fishers in share and ownership was spread fairly equally and widely throughout the fishers themselves, which was, indeed, the case. After the steam drifters the capital threshold for buying boats and their costs of operation increased so that the ownership of the vessels passed from the fishers to shore based capitalists paying a wage rather than a share of the catch.(Deas 1981, Thompson et al., 1983 pp.18-19) It is the second picture which is somewhat inaccurate. About half of the steam drifters were owned by the fishers themselves.(Gray 1975 pp.157,179) Also, many fishers continued to operate the older sail boats, such as the Fifie and Zulu. While wage labour was employed on the fisher owned steam drifter and trawlers this was not the transformation of the share sector to a capitalist wage form tout a fait; wage labour on these boats was limited to seasonal supplementary labour and to that of the engineers and firemen. As

Thompson's own blurred account of the disputes of the latter half of the 19th century indicate, the majority of crew members were paid by share.(1983 pp.60-63) Also, debt, which was described as sign of simple commodity production in decay,(Deas 1981a) was characteristic of the East coast vessels throughout the 19th century without it constricting their freedom and development.

It is certainly true that the diffuseness of ownership among the fishers became less widespread or accessible to them but there is no evidence that this led to either differences in living standards or social relationships that they clearly describe for the sector owned by shore base companies or of a capitalist class among the fishers. It is, after all, difficult to paint a picture of an investment level that incurs enormous debt burdens but which enables their fisher owners to invest in multiple vessels and affords them a lavish standard of living. This is especially so when the running cost of the vessels supposed to be causing this inequality covaried with the effort put in but not with the catch. The running time of the vessels and not their catch determined the cost of the trip.

A more accurate picture would describe this time of the introduction of the steam drifter as one accompanied by changes in the pattern of ownership with the emergence of non-fisher owned vessels in the East. In the fisher owned fleet the introduction of the steam drifters was accompanied by changes in the dissemination of ownership of these vessels among the fishers with the influx of shore based share owners. There remained, nevertheless, a substantial number of sail boats that survived. In the fisher owned boat most of the crew were paid by share, although there was more use of wage labour in the steam drifters. In the company owned boats the crew, except for some skippers, were excluded from a share of ownership and were all primarily paid wages. There was also a complete transformation of social relationships on these boats. The skippers were more autocratic and quartered separately from their crews on the boat

and they and their families lived separately, in better housing, from them ashore.[7] The fisher owned steam drifter and older sail boats formed the basis for the continuance of the share system throughout the early part of the 20th century.

The company owned ships in Britain were forming larger company fleets and contributing greater proportions of the total British catch but the movement towards concentration was constrained,[8] especially in Scotland. The company trawler fleets were beset by difficulties from the outset which accompanied the separation of the fishers from the ownership of the boats and the social differentiation between the skippers and crews.[9] Problems of development and concentration which cannot be explained away in terms of the Buddenbrooks syndrome, of which economic historians are so fond and which Gray(1978) suggested, nor in terms of the diversity of the interests of their owners while remaining within the framework of the economic theory used to explain the rise of the company fleets.[10] Among the problems identified were a lack of development of the vessels and equipment comparable with either foreign vessels or the share owned fleet,(Thompson et al.,1983 pp.113-5) social conflict between the owners and crews and between skippers and deckhands, difficulty in getting the crews, who were contracted for a trip, to return for subsequent trips, a high accident level among crews,[11] and drunkenness. These problems do not seem to have been trivial for the comparative efficiency of the trawl fleet through the middle of the 20th century. Capitalism's dynamic was quickly faltering.

The pinnacle of both the herring fishery and the company trawl fleet was the period at the beginning of the 20th century until WW1. While there were difficult years in this period for both fisheries the overall direction was upwards. For the share owned fleet, who had come to specialize more in the herring fishery, over and above the disruption for their fishing of the war, they lost their main buyers in Continental Europe with the

war and the revolution in the USSR. For the company owned sector the war disrupted their activities. After the war both fleets were immediately experiencing very high catches (Wise 1984 p.79) and ultimately a price slump. Soon this was followed by the cycles of the interwar depression which affected the home market and compounded each fisheries' cyclic tendencies. Nevertheless, while both the company and share sectors were affected they were differently affected as were sub-sectors within them. The effects varied with the species of fish that they were harvesting, where they were harvesting them and the customers they were serving.

The company owned trawl sector of the industry concentrated on the white fish market. Hull's specialism was the cheap mass market serving the expanding fish and chip shop trade. They fared better than Aberdeen which was always a near- to mid-water fishing port and which had focused on the better quality, higher price fish. Of course the company fleets retained their overall dominance of the industry in this period and the share owned sector shrunk and accounted for a minor portion of the total national catch. The share owned sector continued to dominate in the shrunken herring market while diversifying away from their previous heavy dependence on herring and eradicating the extra expense in craft by using dual purpose boats.

Contrasting with the picture painted of a languid trawler business in the interwar period the share fleet experienced severe difficulty that dramatically reduced their numbers. Those that survived, nevertheless, undertook development and experimentation in technique and technologies which helped save the share fleet. These took the form of the adoption of seine netting, of first, paraffin and, second, diesel engines which were cheaper to run, and radio receivers from the 1920s. These could be incorporated into the older sailing vessels without devaluing them. The adaptation also took the fishers away from the rigid vessel specialization of the earlier herring fishery towards a more flexible craft that could easily and effectively be used

for either pelagic or demersal fishing. Simultaneously, both investment and running costs were greatly reduced from the very high levels of the steam powered boats. These developments resulted in a reversion to a more diffuse pattern of ownership of vessels among the fishers and the sole use of the share payment system among the fisher owned vessels.(Deas 1981) The calculation of their share remained at the modified 50-50 to the boat and the crew rather than the reverting to the boat share equaling one crew share. In the herring fishery a further reduction of 5%, on top of the 50% boat share, was taken because of the expense of the drift nets. Neither modification seems to have adversely affected the egalitarian relationship between the share fishers, although their numbers were greatly reduced by the interwar depression when some migrated to find work or reluctantly went to work on the company trawls. This method of calculation formed the standard for the share system until now.

A curious example of an awakening realization of a trawl company to the inefficiency of its social organization is provided by Thompson et al., (1983 pp.160-1). They cite an example of a trawl company who, after buying a fish seller's business in Peterhead in 1910 and in 1912, discovered that the share fishers, in whose vessels they had bought minority shares with the company, had made a better profit than the company owned vessels over the previous five years. In 1920 the same firm bought a fleet of 12 drifters which never made a profit. From then on they resorted to using the share ownership system and holding a minority share in a fisher owned vessel. The company persisted with this policy through phases of difficulty for the boats or the industry:

> "The local reports to head office from the port show a close watch of boats in difficulty, from disputes between owners or from mounting debts, but the local agent always looked for a solution which kept the boats working independently...
> The survival of boat-ownership among the fishermen thus rested as much on the will of the salesmen as on the niceties of legal ownership." (Thompson et al.,1983 p.161)

The firm of Irvines still operates as fish sellers in Peterhead

at the present time. The authors also report another firm in the the 1930s who, while they would foreclose on vessels running up mounting debts that they considered to be in an irretrievable position, had no desire to take more than a minority share in the vessel themselves. Thompson et al., are embarrassed by their findings in regard to the fish selling companies and the companies' own conclusion regarding the better efficiency of the share owned fleet, hence their statement that the survival of fisher ownership depended on the will of the salesmen. This contradicts the companies' conclusions that the method was more efficient than company ownership and direct control. This is, moreover, the sort of relationship between the fisher owned vessels and the fish selling companies that seems to exist now.

The fisheries were hit with sometimes extremely severe difficulties in the interwar period which, with the fisher's lobbying of government, brought the Sea Fish Commission in 1933 to examine and make recommendations for the fishery. Out of the investigation came the Herring Industry Board which, with some success, attempted to regulate this fishery to improve the quality of the the herring and the price the fishers attained for them, offer the fishers loans, buy and scrap some of the old steam drifters and finally institute some general research. The Herring Industry Board and the White Fish Authority, which was formed later, provided the basis for postwar government fishing action. The war itself brought other activities to the fishers.

The Fishery in the Post 1945 to 1970s Period.

State fishery activity was not new. Despite the general state action affecting fishing the payment of the herring bounty, first for boats from 1750 and then for herring caught from 1786 and the investigating commissions that preceded and succeeded attest to this. Adam Smith himself raged against the herring bounties in the Wealth of Nations. State activity either in the form that Smith would heartily approve of in securing the boundaries and

order of the nation or in the form that he would heartily disapprove of in trying to promote and foster the fishery continued. In 1882 Britain was one of the signatories to the North Sea Convention which established the 3 mile fishing limit for the parties to it and a co-founder of the International Council for the Exploration of the Sea. Nonetheless, the British government in the 19th century strove to retain international freedom of the sea to the extent of excluding the British Company trawlers from fishing within the 3 mile limit while not excluding foreign trawlers. It was the enforcement of sovereignty over the extended areas surrounding countries that modified the fishery's operating context in the post-world war Ⅱ period. The first to implement and exercise such an enforcement was Iceland.

The immediate post war period, like that succeeding WW1, saw a large increase in the yields of all species to both the trawler and the share fleet. Also like the post WW1 situation this period was marked by spells of glut and falling prices. Unlike that period the government acted more positively passing the Inshore Fishery Act in 1945 offering a combination of grants and loans to fishers. Grants and loans of 30% each were available to cover the cost of either the renewal or improvement of boats, engines and equipment. The government also regulated the price of fish, as it had other foods and commodities, but removed this restriction, in part due to the insistence of the trawl companies. The companies operating the trawl viewed the situation as one loaded with opportunity to make very big profits and called for the removal of government restrictions that they believed hindered them from achieving this. The companies did make big profits. They paid larger than normal company dividends and reinvested well below their potential in this period, as Tunstall (1963) clearly details. It was not too long before the government were advancing money to the company trawl sector too to assist them. The trawler companies were receiving financial aid for investment and operating costs from early in the 1950s and were able to make

the harvesting side look unprofitable by being major price setting purchasers of their own product. The general availability of assistance compounds the problems associated with attempting to explain the persistence and success of the share owned small scale production sector in terms of government action.

The availability of grants and loans did not spur the company sector to reinvestment (see Tunstall 1963) to the same extent that it did the share owned sector. During the 1950s and early 1960s the number of trawlers declined although their quality increased as it was the older boats that were phased out and replacements for those lost in the war had been built. The numerical decline gained pace in the 1960s and 1970s becoming a qualitative decline as new boat investment lessened further in the 1960s and virtually ceased in the 1970s. By the mid 1980s the large company trawl fleets ceased to exist. The share owned and paid, inshore, fleets embarked on a phase of technical development that built up in pace and quality throughout the post-1945 period. This expansion seems to have only hesitated during times of crisis or difficulty as with the oil price rises of 1973, 1974 and 1979 and the increases in interest rates in the early phase of the Thatcher government. The latter hiked the fishers' loan repayments and made imported fish cheaper through raising the value of the pound. During the second phase of the field work interest rates were again rising when fish prices were dropping and the fishers were speaking of cutting back on some repairs and reinvestment while enlarging others to help them ride it out. In the post-war period the evolution of the company owned sector and the share sector have been very contrasting with the former gradually atrophying and the latter expanding.

The developments that have been undertaken in the post-war period by the fishers in inshore sector include: 1. Continuous growth in the size of vessels. 2. The continuous improvement in the design of vessels which has meant that their capacity and power have increased beyond the previous limit for their size to

equal that of larger vessels. 3. Continuous improvement in the power and efficiency of the engines on the vessels. 4. Improvement in and expansion of the electronic equipment aboard the vessels. This is especially so for the mid-range vessels and above and include the introduction of star navigation system connected to onboard computers that allow the keeping of extensive records of fishing grounds and previous patterns of trawl and performance. There has also been development in the fish search equipment used onboard and the number of radio transceivers to communicate between vessels operating as a pair team in secret and attempt to monitor other vessels that are in competition. 5. Improvements in the nets which have made them bigger,stronger and lighter. 6. Improved hydraulic equipment. 7. The boats, from being largely open or having either a small whaleback or shelterdeck are now more often and increasingly full cover deck craft which protects the crew and improves the boat's performance. 8. Introduction of onboard gutting machines. Overall the share fleet have continued their tendency to innovate and progress but only at a faster pace than before: McKay (1982 p.53) estimated that in the 1970 - 1980 period, the period of the decline of the shore company trawl sector, the catching capacity of the Scottish fleet increased by between 35 and 40%. While some of these improvements have been effected through new boat construction many have been effected onto existing boats without requiring a new vessel. However, these developments have also meant that the fishery has now reached a level of harvesting power which is greater than both the capacity of the fish stocks to reproduce and the government's ability to either control or moderate their effects.

It is from the period of the 1950s onwards that some social theorists consider the trawling fleet to have commenced this relative decline. Deas (1981) considers that as soon as they abandoned their free market principle they were on the rocks and Thompson et al., mark the beginning of the decline about this time. Curiously, though, it was about this time that the trawl

companies in Scotland embarked upon a process of concentrating the ownership of the vessels. In 1951 there were still over 105 companies registered at and operating out of Aberdeen, 67 of these companies owned only 1 vessel.[12] However, the companies were soon participating in the developments of the time which saw the government encouraging the concentration of sectors of the British economy in the 1950s and 60s. By 1976 80% of the company fleet were owned by seven major companies operating out of Aberdeen; this group might be called the seven brethren because of their importance for the harvesting side in Aberdeen and their interconnection with many of the shore side fishery businesses such as fish selling, provisioning of boats, marine engineering etc. What studies (Deas 1981, Thompson et al.,1983 Gray 1975) spoke of as beginning in the 1890s and described as the fisheries and their working class crews participating in the normal developments towards the concentration of production and of class consciousness that characterized the wider economy apparently seemed to be happening in Aberdeen. Ironically, it was doing so just in time for the total disappearance of the sector itself from the harvesting side in Aberdeen and Britain. The concentration of production did not prove to have the economic might and innovativeness predicted by social theory.

Undaunted by this apparent contradiction,the strategy is to argue that the responses of the trawling companies to the changing politico-economic circumstances of the 1970s led them to alter their approach to exploiting labour.[13] Deas argues that one way that they did this was to invest directly into the inshore fleet converting the share fishers into the equivalent of wage labour for, now, merchant capital. The relationship was now a hidden one, hidden within the kernel of the share payment system which enforced wage cuts in times of crisis and concealed the exploitative nature of the relationship. He argued that this was true regardless of whether the sales companies owned all or only a minority share in the vessels. The trouble with this view

is its sophistry; it is necessary that the fishers be subject to more frequent or severe times of misfortune otherwise they are being overpaid and the companies are far from extracting the maximum surplus value. In Marxist terms, in which Deas' analysis is couched, the ex-trawling and fish selling companies are deluding themselves in this practice through their Machiavelian lack of faith in the fetishism of the wage relationship into false consciousness. In this delusion they are paying over the socially necessary value for the quality of labour that they are utilizing in the fisheries.

In contrast I will show from the analysis of the replies of the fishers that were interviewed for this study that they consider that they have been earning good incomes. I will also show that the assessments of the average income per fisher was good for the periods for which it was made. Also the replies indicate that the experience of the fishers of their work is not of either a rationalized and routinized work process nor of one beyond their control as is necessitated by both Marxist and Weberian theories of socio-economic development.

The analysis that I have proposed so far is that the share owned fleet had a more dynamic trajectory of development than the company owned fleet on the East coast. That the share sector, while experiencing the cyclic tendencies specific to itself and of the wider economy, underwent an unprecedented phase of strong expansion and development. In the same time the share system remained largely as it stood prior to WWII. In contrast the company owned trawler fleet entered the post war period in a languid state from which, despite a phase of high profit and warning of changing circumstances, they never broke in Scotland and England. The extension of fishing limits only exacerbated their self-made problems and cannot explain the demise of the company owned trawlers operating out of Aberdeen, Fleetwood, Hull, Grimsby etc. It is, for one, the responsibility of entrepreneurial capitalists to adapt to changes in circumstances and out-compete

all others, especially those operating small scale production. In terms of economic and social theory they should have moved to the inshore sector and by their efficiency shown the small scale share sector the door. The decline of the trawler fleet can be seen in the following table of the relative importance of Scottish ports for the landing of fish between 1965 and 1984. This table shows the main expanding and declining ports for the landings of demersal fish, which are the most important in terms of both weight and value.(The figures for all the other ports in Scotland reveals that no single port accounted for more than 3% of the Scottish total in this period and that their percentage contribution was either declining, remaining static or showing a very small, usually less than 1%, gain.)

Table 1. The Total Percentage of Demersal Fish Landed in Scotland by British Registered Vessels by Fishing District.

Port	1965	1979	1984	1989
Aberdeen	44.5%	25%	14.36%	14.49%
Fraserburgh	7.4%	5.6%	5.6%	6%
Shetland	4.8%	12.9%	16.5%	10%
Peterhead	3.7%	31.7%	33.1%	36.4%
Total Wt. (tonnes)	444361	505254	282749	208135

(Source;the figures for 1965 and 1979 come from Deas 1981 p.145 and those for 1984 and 1989 from the Scottish Abstract of Statistics 1986 and 1991.)

Conclusion.

This chapter examined the history of the Scottish Fisheries as was evident from secondary sources. Throughout, the focus was on the methods of ownership of vessels and gear, the methods of distributing the income, the use or marketing of the catch, the cyclic tendencies of the industry and on the development of vessels and equipment. The fisheries' history suggests that primarily there have been three distinct styles of ownership and of distribution of incomes. The first two were characteristic of

an East-West divide in the fleet where in the East the boats were owned by the fishers and the income distributed amongst themselves and in the West the boats had shore owners who obtained a substantial proportion of the income. The third was introduced with the emergence of shore based companies in the late 19th century in Aberdeen where the boats were owned by non-fishers and the fishers,with the exception of the skippers, were paid a wage.

The histories of the Scottish Fisheries indicated that the most resilient and dynamic sector and, latterly the most productive sector, was the share owned and share paying sector of the fisheries. While this sector was eclipsed for a time by the boats owned by the shore companies based at Aberdeen in terms of their contribution to the output of the Scottish Fisheries the company owned, wage paying sector, quickly showed signs of lethargy and later withered away so that there is now no evidence of an extensive shore based company owned fleet. Insofar as the most resilient, dynamic and productive sector has been the share owned and share paying sector on the East this suggests that there is something qualitatively unique about this sector that would account for its success. One aspect that emerged from the histories of the fisheries is that the fishers on the East coast retained ownership of their vessels and were embedded within social relationships which helped them to finance this with more independence of action, even where they were indebted to shore concerns such as the curers. And the share payment system meant that the equality of risk and call to effort was matched by a closer equality of return. Indeed, as Thompson et al's study (1983) indicates when a wage element was introduced with, first seasonal supplementary labour and then for specific jobs social conflict emerged in this sector. The hypothesis drawn from this is that the share sector had a different structure of social relations within which it was embedded and a different set of social relations on board the

vessels amongst the skipper and the crew from that of the other forms of ownership and income distribution that has been practiced in Scotland at one time or another.

Chapter 2. Footnotes.

(1) In a later chapter it will be argued that the fishers interviewed still consider the share payment system to have been an efficient method for distributing the vessel's income.
(2) An interesting question that has not been discussed in any of the historical studies of Scottish Fishing Industry is why was the share system adopted and practiced in the first place? Neither the extent of capital investment involved nor the element of risk incurred answers the question; neither inhibited the adoption of other forms of ownership elsewhere.
(3) This traditionally implies a low, if stable, living standard.
(4) Gray concludes the following of this fishery:

> "Even by 1815 Caithness fishermen and curers had achieved much.... But perhaps just as important was the example it gave of how the herring stocks of the east coast of Scotland could be cheaply and reliably exploited. It provided a model that was capable of being moved to other parts of Scottish coastline. In fact a means had been discovered by which the whole of a rapidly growing body of fishermen up and down the east coast could find profitable employment in at least a seasonal herring fishing. And once they turned to herring, much of their traditional way of life had to change. In 1815 there were mounting signs that the older communities of white fishers were beginning to take to the new herring fishing."
>
> (1975 p.38 My emphasis.)

(5) Gray considers that the returns for this short season's fishery for most could not automatically justify the fishers very substantial investment in boats and equipment for exclusive use in herring fishing.(1975 p.47) He proposes a gamblers instinct for the fishers as the external factor to account for what the market model is unable to:

> "In any year there was a wide difference of individual success, with the best-fished boats running up totals three or four times the average. The prospect of the highest gains, however, were in fact delusive for the great majority....For the majority of crews the most likely outcome was a gain that was slightly above those made from other types of fishing...."
>
> (1975 pp.41-2)

(6) This point is one where the talk of the need of new theories collapses into a revamping of old theories; this is simply Durkheim's model of balance between the community and the individual in social solidarity as found in Suicide. Rather than provide the new theories to explain the situation as Thompson et al., argue to be necessary they compose a patchwork quilt of Marxian, Weberian and Durkheimian theory which incorporates the flaws of each without resolving the difficulties of any.
(7) The trawler skippers greater willingness to impose their authority, the separate sleeping and eating quarters of the officers and of the crews, the designation and the carrying out of separate duties and responsibilities amongst the officers and the crews are all noted by Tunstall(1966 pp.119-34) for the Hull company fishers and by Thompson et al.,(1983 pp.117-30) for the Aberdeen fishers working for the shore based trawl companies. These practices contrast strongly with those that have been described as characterizing the share owned and paid fleet. The skipper's and crews relationships are less hierarchical and are

described as more informal than formal,they eat and sleep in the same quarters, the skipper is described as in charge but as a subtle communicator of his authority, and their duties and responsibilities are less demarcated and involve a 'pulling together' especially when the work load is heavy.(c.f.,Deas 1981 Byron 1985) During the fieldwork for this study I found myself interviewing a number of retired fishers one of whom had been a skipper on both the Aberdeen based company owned vessels and the share fleet vessels. He described the way that he exercised his authority on both in striking contrast. On the company trawls he said that he exercised a military command over the men, as he had done in the Royal Navy during his war service because the men on board these trawl boats were "...hard men that needed to be kept in their place all the time and not let get out of hand. They'd tramp all over you if given the chance. You had to show them who was boss....". This was very different from the share vessels where he said that the fishers had a different quality.

(8) Here there is a tendency to idealize what in other circumstances of study are considered problematic. There is a tendency to characterize developments in the economy and society at large as according the expectations of the theoretical ideal. They are described as according thus in the development of the economy and of its appropriate social, class, consciousness when describing the developments of the fisheries. Deas speaks of the normal, theoretical, developments which characterize industrial capitalism in Scotland and elsewhere as unfolding in the fisheries. He also sees the nascent beginnings of a trade union movement in the 1970s in Peterhead as part proof of the fulfillment. I could find no trade unions, I could find only disparaging remarks of trade unions among the fishers that I interviewed from all ranks and vessel categories. Similarly, Thompson et al., speak of the development the normal class consciousness that characterized Victorian industrial capitalism in the fishers. Perhaps their attention should be drawn to some of the debates on this subject which have culminated in the recent study of the Formation of the Working Class edited by Katznelson et al.

(9) "...in Aberdeen...even when people of old fishing tradition enrolled with the new fleet they had to <u>suffer</u> a complete break with the old relationships and ways of <u>working</u>...."
(Thompson et al.,1983 p.126)

(10) It is especially not possible to explain the difficulties away thus while remaining within the more general framework of either neoclassical economic, Marxian or Weberian theory.

(11) A higher accident level than on the share owned fleet; Thompson et al., (1983 p.21) give a factor of 7 × death rate of inshore fleet on the company owned fleet.

(12) There is also a possible problem here in that legal practice is being confused with social practice. Just as it is more convenient and practical for co-operatives to register as limited liability companies than it is for them to register as co-operatives under co-operative legislation it may be so for the fishers because it limits their personal liability among other things. Company ownership in this sense would not automatically equal capitalist ownership either in the theoretical or the practical sense of the term.

(13) Thompson et al.,for example,ask:

"Why...have some fishermen proved dogged- if often defeated- trade unionists while others so frequently anti-union, at a time when all have been <u>increasingly</u> at the mercy of big capital? Why has the growth of big business interests in the fishing industry not been met by a growth in class consciousness among fishermen, as it <u>has</u> [sic] among miners, dockers, railwaymen or factory workers?" (1983 p.4. Emphasis added.)

(14)The figures for all the other ports in Scotland reveals that no single port accounted for more than 3% of the Scottish total

in this period and that their percentage contribution was either declining, remaining static or showing a very small, usually less than 1%, gain.)

Chapter 3.The Recent Structure of Operation and Ownership of the Scottish Fisheries.

Introduction.

The questions of interest now are a, what was the structure of operation of the Scottish fleet and b, what was the pattern of ownership for the Scottish fleet at the time of the study in 1986-89. Fortunately, in this period there was a new register of fishing boats compiled. All fishing vessels in Britain were required to register prior to March 1989 or lose their status as fishing vessels. The loss of this status entailed at the time the loss of a number of rights and privileges associated with licensing and such things as tax relief on fuel costs. Using the data that was obtainable from this register, through the Registrar General of Shipping and Seamen, I will, first, detail the total number of the Scottish fleet and its size structure, and then its ownership pattern, as that is possible,from this data.

Categories of Fishing Vessels in the Scottish Fleet.

The most apparent and indicative variable of differences in the fleet is that of the vessel's size measured by its length. Firstly, it offers the potential to take account of the rising capital and running costs of the vessels. Secondly, it makes it possible to identify any variation in the patterns of ownership which may be associated with capital and running costs. Thirdly, both the income and the conditions onboard improve with the vessel's size. Fourthly, the size of vessel, and the consequent catch power, indicate important differences in the fishing capacities of the vessels. Fifthly, size indicates variation in the degree of integration of the vessel with shore organizations

ashore and in the outlets for the catch. For all these reasons the vessel's length is a good indicator of variation in the fishing vessels. It needs to be noted, though, that it is not an unproblematic indicator; the location of the boundary between categories of boats remains a problem and this is compounded by technological improvements which increases the capacities of the smaller boats. Nonetheless, length remains a good indicator of relative difference between vessels.

The Department of Agriculture and Fisheries has published a Cost and Earnings survey for the Scottish fleet for the years 1977 to 1983 which provides crewing, income, cost and fishing data for boats. It does this for the predominantly demersal boats in the under 40 ft and 40 - 80 ft categories. Next, this is given for the predominantly pelagic boats in the 80-100 ft and the 100 ft plus categories. Tables 1 and 2 show how the fisher's average income varied with the boat's length:

Table 1 Income Estimates for 1983 for Demersal Boats Between 30 and 80 feet in Length. (Source DAFS SESU 1985)

Boat Length in Feet.	Average Income per Boat per Year.	Average No. of Crew Members	The Average Yearly Income per:	
			capita	crew member
30 - 40	£ 44,300	2.9	£ 15,275	£ 5,276
40 - 60	£ 105,700	4.5	£ 23,488	£ 7,488
60 - 80	£ 209,600	6.9	£ 30,376	£ 10,072

Table 2 Income Estimates for 1983 for Pelagic Boats Over 60 feet in Length. (Source DAFS SESU 1985)

Boat Length in Feet.	Average Income per Boat per Year.	Average No. of Crew per Boat.	The Average Yearly Income per:	
			capita	crew member
60 - 100	£ 399,000	8	£ 49,875	£ 16,075
> 100	£ 501,000	9	£ 55,667	£ 18,511

From the above tables it is apparent that the average income shows substantial variation among the different lengths of boat.

As well as income there are also substantial differences in the time spent at sea per trip and in the types of fishing pursued between the different length which suggest that for the analysis they can be grouped into three categories of vessel. The survey indicates that each group had different lengths of fishing season; the 30-40 ft boats spent 47.2 days at sea whereas the 40-60 and 60-80 ft boats spent 130.1 and 154.3 days respectively. These differences reflect the fact that boats under 40 ft tend to leave and return on the same day and only fish within about 5 miles of there home port. The 40-80 ft boats spend between 3 and 10 days at seas per trip, journeying much further out than the smaller boats. These differences also reflect that the former fish only during the periods of better weather in 6 months, mainly over the summer, while the latter fish throughout the year. Also the fishers on the under 40 ft boat category tend to use either drift nets, hand lines or creels, whereas those in the 40-100 ft category of boat deploy either heavy beam trawls, otter trawls or seine nets,etc., that are able to catch far larger amounts of fish in a single shoot of the nets than the smaller boats can in a day. As well as these differences the under 40 ft boats are open boats whose fishers are more exposed to the weather. The larger boats are mostly, and increasingly, full cover deck craft which offer their fishers more protection from the elements. Thus, for reasons of difference in income, lengths of trip and fishing seasons and methods and greater or lesser exposure the initial division by boat length should be between the under 40 ft class and the 40-80 ft class which principally fish for demersal species.

In the Income survey there is some overlap when they examine the pelagic fleet; in doing so they classify it into 60-100 ft and 100 ft and over. However, this is not quite the problem that it seems. While substantial differences in the incomes of these two classes of pelagic vessels can be distinguished, even in 1983 when the survey was conducted, their number was limited by

pressure stock licensing to only 42 craft in Scotland. While the numbers have remained constant their size has not; the interviews with purse fishers and officials in the industry indicate that 90% of these boats are now in the over 100 foot category. Also, according to the registration of fishing vessels the number of Scottish boats between 80 and 100 ft in length was exactly 19 in 1989, or 1.5% of the fleet between 40 and 100 ft. Pelagic fishing is a seasonal activity determined by the migratory patterns of the fish and the quotas for the species. The season is less than 6 months, beginning in July. Sometimes the pelagic fishers extend their active season by fishing demersal species for part of the rest of the year. The length of the trips that the pelagic respondents reported were the same as those in the 40-100 ft category; between 3 and 10 days, averaging at 5-6 day trips. Thus, I suggest that due to the very small numbers between the 80-100 ft and the fact that they use like methods to pursue like species for the same seasons as those in the 40-80 ft category that this category be extended to include them. Further, due to differences in income, species and type of fishing pursued I suggest that it is acceptable to consider the top category as over 100 ft.

This information on the sailing and fishing practices of the various craft categories was obtained from interviews conducted with fishers and officials involved in the fisheries either in the government offices, the Scottish Fishermen's Federation, the Sea Fish Industry Authority, the Fish Producer organizations, Fish Salesmen, etc. The fishers, themselves, spoke colloquially of the under 40 ft. boats as day trippers, ripper boats, scratchers,etc., which described the particular fishing practices and routines of these boats. Also, the fishers in these under 40 ft. boats usual undertook their own overhauls, repairs and improvements during the winter months, thereby saving on these costs. Because of the size and sophistication of their boats the fishers in the over 40 ft categories only undertook minor repairs etc., themselves and they relied more on shore based companies for these things.

The Size Structure of the Scottish Fleet.

In 1989, according to the Register of Shipping and Seamen, there were 2990 fishing boats in the Scottish fleet. Of this, 62%, 1853 vessels, were under 40 ft in length, 36%, 1078 vessels, were between 40-100 ft and 2%,59 vessels, were over over 100 ft. Numerically, the under 40 ft category forms the single largest segment of the Scottish fleet but, in terms of employment and production the largest segment is the 40-100 ft category. Their crew averages were 2 and 7 fishers per vessel, respectively.[1] The value of the fish caught by each category of vessel can be estimated by summing the value of the catch attributed to each fishing method [2] practiced by a particular category of boat. This gives a total of approximately £1,656,000 for the under 40 ft boats and approximately £137,484,000 for the 40-100 ft boats in 1984. While this method does attribute some of the former's catch to the latter, it does not significantly alter the balance between the two. Consequently, by their continuous fishing season, their different crewing levels and the value of their catch, the most significant vessel category for the Scottish Fisheries is the 40-100 ft category.

The geographical distribution of the fishing boats can be determined because each fishing boat is registered to a port of registration. That port, however, is not necessarily the one where the boat is predominantly berthed, nor is it necessarily the one where the boat's catch is predominantly landed. The registration port is usually the one nearest to where the fishers who own and use the boat live.[3] From the geographical distribution of the different categories of boat it is possible to check to see if anything of the East-West divide which was noted above of the Scottish Fisheries, historically, persists in the present. The geographical distribution of the categories of boat among the West, Shetland and the East coast, according to their port of registration and boat category,[4] is displayed in Table 3:

Table 3. The Number of Vessels in the Scottish Fleet in Each Size Category and their Geographical Distribution Throughout Scotland by their Port of Registration.
(Source: Register of Shipping and Seamen.1989)

Region of Port of Registration	Category of Vessel in Feet.					
	Total	< 40		40 -100	> 100	
West Coast	1056	838	79%	216 20%	2	.3%
Shetland	198	142	72%	43 22%	13	6%
East coast	1736	873	50%	819 47%	44	2.6%
Total	2,990	1853	63%	1078 35%	59	2%
North East	972	318	33%	613 63%	44	5%

From Table 3 it can be seen that 35% of the Scottish fleet is registered at ports on the West coast, another 58% at ports on the East coast and the remaining 7% in the Shetlands. The crews of these boats are most likely to have originated from and to be living in close proximity to these ports.(c.f.,Byron 1983, Cohen 1987,Goodlad 1973, Knipe 1984, Thompson et al.,1983) Consequently, the registration of the craft can be taken as indicative of West coast, East coast and Shetland fishers. The largest and most important section of the Scottish fleet is registered to East coast ports and the bulk of the fishers reside there.

From Table 3 it can also be seen the West coast boats are mostly in the under 40 ft class of vessel; 79% are in this class and only 21% are above this. The East coast fleet, in contrast, is composed of 50% under, and 47% over, 40 ft boats and slightly over 3% of the fleet in the over 100 ft category. The composition of Shetland's fleet more closely resembles that of the West coast fleet with of 72% under and 28% over 40 ft boats. However, nearly 7% of that fleet, unlike the West coast fleet, is over 100 ft, well above the average of 2% for the Scottish fleet as a whole. Thus, in terms of the size structure of the Scottish fleet the West and the East coast segments continue to display their historical division as does, largely, the Shetland fleet.[5]

Fishers using under 40 ft boats tend to fish for only six

months of the year and to earn a lower income than those using the larger boats. It seems reasonable to consider that those in smaller boats are more likely to be operating some form of occupational pluralism and that the fishers on the West coast are more likely to be doing so than those on the East coast.[6] This is in fact reported by Byron for Barra and Mewett (1977) for the Island of Lewis; who report fishing to be combined with crofting. It was also reported to me by others in the Scottish Fisheries with whom I discussed the Fisheries.

The over 40 ft craft are technically more advanced than the under 40 ft craft, offer their crews more protection from the harshest elements and more safety while affording them a better income from more continuous fishing that the over 40 ft segment can be considered the most advanced and productive segment of the Scottish Fishery. With 72% of the over 40 ft segment located on the East coast, the East coast sector is the most developed, productive and dynamic sector of the Scottish fleet and fishery. (57%, near three fifths, of this segment of the Scottish fleet are in the region of the North East.) A relative position confirmed by the statistics of fish landings for the Scottish ports as shown in Tables 4 and 5.[7] The figures for 1984 were used because these were the latest ones available at the beginning of the study and were used to orientate it and those for 1987 as these were the latest available at the end of the study and referred to the middle of the study period.

Looking first at the different species landed in Scotland the most important species landed in 1984 and 1987 was, and remains, the demersal species; this accounted for 70% of all the fish landed in Scotland in 1984 by value and 68% in 1987. In contrast, while the pelagic species landed almost equalled the demersal catch in weight in 1984 and exceeded it in 1987 its much lower average price per tonne than that of the demersal species (approximately a tenth of the price) meant that it contributed only 13% of the 1984 total by value and 11% in 1987.

Table 4. Fish landings in Scotland, by UK vessels, by District in £ thousand.
(Scottish Abstract of Satistics 1986 & 1989)

District Landed.	1984				1987			
	Demersal	Pelagic	Shellfish	Total	Demersal	Pelagic	Shellfish	Total
West Coast	23142	19808	24023	66973	32810	18135	39704	90649
East Coast	104924	2348	7887	115159	137918	7314	15741	160973
North East	92733	2278	2916	97927	127331	8297	11627	147255
Orkney	291	-	1007	1298	2724	-	1450	4174
Shetland	7641	2289	561	10491	13019	5586	624	19229
Scotland	135997	24446	33478	193921	186472	31035.	57519	275025

Table 5. Landings in Scotland, by UK vessels, by District in Tonnes.
(Scottish Abstract of Satistics 1986 & 1989)

District Landed.	1984				1987			
	Demersal	Pelagic	Shellfish	Total	Demersal	Pelagic	Shellfish	Total
West Coast	56046	186338	24712	267096	58988	163062	26988	249038
East Coast	179062	21342	7834	208238	175347	62305	9895	247547
North East	157997	20765	2951	181713	152858	61909	7662	222429
Orkney	1028	-	1077	2105	3970	-	1188	5158
Shetland	46613	18342	921	65876	25447	46803	871	73121
Scotland	282749	226022	34544	543315	263752	272169	38941	574864

Shellfish have a slightly higher average price per tonne than demersal fish which meant that the species were 17% of the total landed in 1984 and 21% in 1987. The principal species and sector for the Scottish fisheries is the demersal species and sector by weight and value followed by the pelagic fisheries by weight and then the shellfish by value and weight.

Ports on the East coast accounted for 61% of all the fish landed in Scotland in 1984 by value (67% ex. shellfish) and 59% in 1987 (67% ex. shellfish) whereas those on the West coast accounted for 35% of the total landed (27% ex. shellfish) in 1984 and 33% (23% ex. shellfish) in 1987. Of the demersal species 77% by value and 63% by weight were landed at East coast ports in 1984 and 74% and 66% by value and weight in 1987. The same data for the West were 17% and 20% for 1984 and 18% and 22% for 1987 by value and weight. The ratios between the value and weight figures indicate a generally higher price is attained in the East, than in the West, coast ports for white fish. Of the pelagic species 81% by value and 82% by weight were landed at the West coast ports in 1984 and 58% and 60% in 1987. The same figures for the East were 10% by value and 9% by weight in 1984 and 24% and 23% in 1987. There is no suggestion of a price difference here although there is of growth in the East coast landings.This growth has occurred at the expense of the West coast landings since it has been greater than the general growth in the landings for the species in this period. In sum, the East is obviously the most important area for the landings of demersal fish in Scotland and the East coast fleet is largely responsible for this given its constitution and location. The East coast fleet is also a major contributor to the landings of pelagic fish, given the constitution of that section of the fleet and the historical migratory nature of the fish and the fishers.[8]

Looking closer at these figures it can be seen that for the East coast activity is centered on the North East corner, stretching from Aberdeen to Inverness.[9] Here, 68% by value and

56% by weight of the Scottish landings in demersal fish were made in 1984 and 68% and 60% in 1987. For the West coast the landings of pelagic fish was overwhelmingly focused in one port, Ullapool. Here 91% by value and 93% by weight of the West coast catch was landed in 1984 and 94% and 93% respectively in 1987. Thus, a large proportion of the East coast activity is focused in the North East and one area of apparent West coast dominance, pelagic landings, is overwhelmingly the product of one port.[10]

The Structure of Ownership of the Scottish Fishing Vessels.

There is a concentration of the bigger and better boats on the East coast, particularly on the North East corner of that coast. There was also to be a similar pattern of concentration of production, or at least landings on the East coast and a heavy concentration of pelagic landings in Ullapool on the West. This concentration provides some accord with the expectations of most social theoretical perspectives. However, there is also the more important expectation of the concentration of ownership and control of the means of production entailed by these theories. This is entailed because concentration enables the formation of a command with a much less encumbered control over the equipment and the labour used to deploy it productively. This is entailed because the greater capital resources provide a more tenacious strength to their owner which facilitates their developing production methods and outriding cyclic downswings in business while outliving, if not overwhelming, their smaller and weaker competitors. A larger production unit, usually identified in these theories as a privately owned or capitalist company, is also supposed to provide savings through the scale of the operation and through enabling the rationalization of production. From these there is a strong and a weak question to be examined. The strong question to be examined is to what extent was the ownership and control of the boats concentrated in the hands of a few companies who could be said to dominate the harvesting

sector of the industry? The weak question still concerns the issue of company dominance and control through their owning something, but less than 100%, of the boats and equipment. The question is weaker in that it points to some weakening in the structure of command because the means of production is less than wholly owned by the company. It is also weaker in that it necessarily points to some weakening in the theoretical positions which entail development and a rationalized command structure. After all, both Marx and Weber define capitalism in terms of the separation of labour from their means of production.

The data that it was possible to obtain from the Registrar of Shipping and Seamen facilitates refutation of the stronger claim and casts considerable doubt on the likelihood of its occurring in the present. The data do not enable identification of how many boats any single company owns. The data shows however that only a small percentage of boats in the Scottish fleet are registered as solely company owned but it does not identify these companies. Therefore, it does not allow identification of the number of singly owned boats that are together registered as owned by the same company. Nor, due to this, does it allow identification of the fishers who have formed their own company to register their ownership and benefit from limited liability legislation. The data does allow the identification of the number of boats that are owned by a number of owners by the share system of ownership as the data is recorded by owners of blocks of shares. The data also allows identification of the boats owned in share that have a company amongst the share owners. While it does not indicate the amount of the shares owned by each individual or company information gained during the interviews undertaken and discussion with different individuals in organizations associated with the industry provides some supplement to the data from the Register of Shipping and Seamen which partially clarifies this issue. Table 6 displays the number of boats in the Scottish fishing fleet owned either singly or in

Table 6. The Structure of Ownership of Fishing Vessels in the Scottish Fleet 1989.
(Source: Register of Shipping and Seamen, 1989.)

Scottish Area of Registrn / No of Owners.	No Owners of Category of Vessel in Feet.						
	Total of Boats With:	< 40		40 - 100		> 100	
		No. of Boats With:	No of Boats With a Cmpy Share Owner:	No. of Boats With:	No of Boats With a Cmpy Share Owner:	No of Boat Boats With:	No of Boat With a Cmpy Share Owner:
1 Owner	1,829	1,505	36	295	62	29	28
2 Owners	595	292	5	296	99	7	3
3 Owners	297	46	4	242	123	9	6
4 Owners	139	5	1	128	70	6	4
5 Owners	58	1	0	55	29	2	1
6 Owners	34	4	1	28	10	2	0
7 Owners	11	0	0	10	4	1	0
8 Owners	8	0	0	7	2	1	0
9 Owners	10	0	0	9	3	1	0
10 Ownrs	2	0	0	2	0	0	0
11 Ownrs	2	0	0	1	0	1	0
12 Ownrs	4	0	0	4	0	0	0
13 Ownrs	1	0	0	1	0	0	0
Total	2,990	1,853	47	1,078	402	59	42

share by individuals and/or companies.

It can be seen from this table that 61% of the Scottish fleet was registered to a single owner. However, only 11% of the fleet which was owned by a single owner was in the over 40 ft category of vessel; 50% of the fleet that was owned by a single owner was in the under 40 ft category. These are hardly the basis for a large scale, centrally, owned business organization such as is anticipated by social theory. In fact the percentage of the Scottish fleet registered as wholly owned by a company was 4.2% and only 3% of the fleet so owned was over 40 ft. Of the over 40 ft category, alone, 28% was registered as having one owner and only 8% was registered as wholly company owned. Consequently, even if all of these company owned vessels were owned by a single company, they would still have not amounted to a very great part of either the Scottish fleet or, more significantly, of its most dynamic and productive sector at that time.

It is true that 49% of the over 100 ft class are registered to one owner, with 47% having company, rather than individual, ownership. This is not quite as it appears. I interviewed fishers and owners from three of these vessels registered at Peterhead and, while they were registered as company owned boats, the company was owned in share amongst the skippers of the boats and their near kin. The boats were still considered share owned by the owners and they gave a breakdown of the ownership in share terms. The company provided them with the benefit of limited liability and the servicing functions of the fish selling agents while saving them the agent's fee. This form of ownership was also personally reported to me as being the case with another 6 of these boats from ports other than Peterhead. Although, legally and formally, the boats were company registered and owned in reality they were fisher owned and operated and utilized the share payment system for dividing the earnings.

Perhaps, though, the company owned boats are geographically concentrated forming a high percentage of the boats registered

at a particular region or port. Perhaps the West has more company ownership or the over 40 ft boats in the most dynamic and productive sector on the East coast is so owned. Tables 7, 8 and 9 show the pattern of boat ownership between individuals and companies in the West, East and North East regions of Scotland.

Of the West coast it can be seen that while 77% of the fleet was in single ownership only 3% were wholly company owned. Of the larger boats only 6% were so owned. Of the East coast fleet, 51% was in single ownership but only 5% were in company ownership. Of the larger boats only 8% were wholly company owned. For both the largest proportion of the singly owned boats came from the under 40 ft category; for the West 77% of of the singly owned boats were in this category of vessel and for the East it was 74%. The smaller boats are more conducive to being owned by one person. Of the 40-100 ft category in the West 51% were singly owned and in the East 22% were so owned. It seems that there are differences in the patterns of ownership between the West and the East regardless of which category of vessel is being considered; while for both the under 40 ft boats were more likely to be owned by individuals than in share, in the West the mid-range boats were also more often individually owned than in the East where they were more likely to be owned in share.

Focusing more narrowly on the North East, which I have argued is the most productive and dynamic region, it can be seen that the proportion of boats individually owned drops to 38% of the total, although 76% of the under 40 ft boats were so owned. Also, less than 18% of the 40-100 ft boats were individually owned and only 7% were company owned. While, apparently, 44% of the over 100 ft category were registered as company owned the actuality of it was that 9 of these, and maybe more, were owned in share and, the figure was nearer 21%. Thus, even in the most advanced, dynamic and productive region sole company ownership accounted for only a minority section of the fleet or of its most dynamic part.

It would seem that even if all the company owned boats in a

Table 7. The Structure of Ownership of Fishing Vessels in the West Sector of the Scottish Fleet 1989.
(Source: Register of Shipping and Seamen, 1989.)

West Area of Registrn / No of Owners.	No Owners of Category of Vessel in Feet.						
	Total of Boats With:	< 40		40 - 100		> 100	
		No. of Boats With:	No of Boats With a Cmpy Share Owner:	No. of Boats With:	No of Boats With a Cmpy Share Owner:	No of Boat Boats With:	No of Boat With a Cmpy Share Owner:
1 Owner	814	703	15	110	13	1	1
2 Owners	190	117	3	73	18	0	0
3 Owners	39	15	2	24	8	0	0
4 Owners	10	3	0	6	3	1	1
5 Owners	1	0	0	1	0	0	0
6 Owners	2	0	0	2	0	0	0
West Ttl	1,056	838	20	216	42	2	2

Table 8. The Structure of Ownership of Fishing Vessels in the East Sector of the Scottish Fleet 1989.
(Source: Register of Shipping and Seamen, 1989.)

East Area of Registrn / No of Owners.	No Owners of Category of Vessel in Feet.						
	Total of Boats With:	< 40		40 - 100		> 100	
		No. of Boats With:	No of Boats With a Cmpy Share Owner:	No. of Boats With:	No of Boats With a Cmpy Share Owner:	No of Boat Boats With:	No of Boat With a Cmpy Share Owner:
1 Owner	884	681	16	183	48	20	19
2 Owners	379	157	2	215	80	7	3
3 Owners	252	30	2	213	114	9	6
4 Owners	124	2	1	117	66	5	3
5 Owners	51	1	0	49	29	1	1
6 Owners	24	2	0	20	10	2	0
7 Owners	7	0	0	7	4	0	0
8+Owners	15	0	0	15	4	0	0
East Ttl	1,736	873	21	819	355	44	32

Table 9. The Structure of Ownership of Fishing Vessels in the North East Sector of the Scottish Fleet 1989.
(Source: Register of Shipping and Seamen, 1989.)

N.E.Area of Registrn / No of Owners.	No Owners of Category of Vessel in Fleet.						
	Total of Boats With:	< 40		40 - 100		> 100	
		No. of Boats With:	No of Boats With a Cmpy Share Owner:	No. of Boats With:	No of Boats With a Cmpy Share Owner:	No of Boat Boats With:	No of Boat With a Cmpy Share Owner:
1 Owner	370	243	11	108	41	19	18
2 Owners	219	57	0	156	68	6	3
3 Owners	209	17	1	184	107	8	5
4 Owners	101	0	0	96	58	5	3
5 Owners	43	1	0	41	28	1	1
6 Owners	14	0	0	12	7	2	0
7 Owners	6	0	0	6	3	0	0
8+Owners	10	0	0	10	3	0	0
Total.	972	318	12	613	315	41	30

region were owned by a single company they still could not be considered to dominate the industry in that region let alone in Scotland. Also, given the widespread distribution of the company owned boats throughout the Scottish ports, they could hardly be thought of as providing the best means to forming a highly rationalized company organization. The principle ownership form is neither single company nor large scale company ownership.

From Table 6 it is apparent that 39% of the Scottish fleet had 2 owners or more and that 72% of the over 40 ft category of vessels had 2 owners or more. Thus, it would seem that the larger the vessel the more chance it would have multiple share owners rather than a single individual or company owner. This was so for all the regions of Scotland where 73% of the 40-100 ft boats were registered as owned in share by a number of individuals. Nevertheless, there were substantial variations in this which accord with the larger number boats that were registered to individual, not company, owners on the West coast; on the West 49% were registered to multiple owners whereas on the East and North East coasts 90% and 82%, respectively, were so registered. The biggest percentage of the most productive and dynamic category of vessel in the Scottish fleet are registered to multiple owners. It is possible that some of the individuals registered as being share owners in one vessel may have shares in other boats. Indeed, I interviewed one individual who owned one boat and had a major share in another. But it hardly seems likely that a person would retain the liability attached to individual ownership of a number of vessels in this category without the protection of limited liability legislation. The liabilities and responsibilities that are attached to ownership of vessels whose average value in 1988 quickly rose from £400,000 per unit for an older vessel to over £750,000 for a vessel of under 5 years old are substantial and would multiply by the number of vessels within which any individual had shares. The risk would also multiply along with the number of others that also had shares in

their vessel that may or may not also have multiple shares in other vessels. Formation of a limited liability company would be the rational and practical approach. This was the case with the 3 companies formed to register ownership of vessels owned by kin relations. Thus, it can be expected that where individual share ownership is registered that it refers to different individuals in the vast majority of cases. Thus, not only was there no evidence of there having been extensive company ownership of boats, but there was evidence of ownership of vessels suggesting that it was by different individuals. There was also evidence that this ownership was by the fishers themselves. Evidence both from other studies of this being historically and currently so, and of it from my own interviews with the fishers and officials associated with the fishery.(Gray 1975, Thompson et al., 1983, Deas 1981, for some of the historical evidence and Byron 1983, Cohen 1987, Deas 1981 and Knipe 1984, for some evidence of the current situation.)

There is a curiosity in this multiple ownership; the more share owners that were recorded the higher the proportion of vessels that had a company share owner. This situation must proportionately weaken the ability of any one owner to claim authoritative control from ownership alone. An inversion of this thesis (to save the more general developmental aspects of the social theory) by claiming that company control does not require sole or major ownership, could only be successful at the same time as it weakens the theory of development itself. The relationship between the number of owners and the percentage with company share owners can be seen in tables 10, 11, 12 and 13.

Focusing on the 40-100 ft boats, it can be seen that less than 50% of them in the Scottish fleet have a company registered as a shareholder. Even on the East coast just 51% have no company registered as a share owner. It can also be seen that the number of vessel in this category decrease, when they are sub-divided according to the number of owners owning them in share, as the number of owners increase rather than the proportion with a

company registered as a share owner either remaining constant or decreasing the proportion, in actual fact, increases. This means, for one thing, that rather than the companies investing their resources either in sole ownership or in boats with few owners that they are happier spreading their investment over a larger number of vessels. It also suggests that they are interested in having something other than the control, strict or otherwise, over the vessels that is ascribed to sole ownership of a vessel. Such a conclusion would accord with some of the findings of other studies. These point out that the company share owners are

Table 10. The Percentage of Scottish Boats with a Company Share Owner that have Either 1,2,3...Registered Share Owners.(Source; Register of Shipping and Seamen 1989)

No of Owners	All Boats	Under 40'	40 - 100'	Over 100'
1	6%	2%	21%	65%
2	18%	2%	33%	43%
3	46%	9%	51%	80%
4	54%	20%	55%	67%
5	52%	0%	53%	50%
6	41%	25%	36%	60%
7	36%	0%	40%	0%
8	25%	0%	29%	0%
9 +	16%	0%	18%	0%

Table 11. The Percentage of West Coast Boats with a Company Share Owner that have Either 1,2,3...Registered Share Owners.(Source; Register of Shipping and Seamen 1989

No of Owners	All Boats	Under 40'	40 - 100'	Over 100'
1	4%	2%	12%	100%
2	11%	3%	25%	0
3	26%	13%	33%	0
4	40%	0%	50%	100%
5+	0%	0%	0%	0%

Table 12. The Percentage of East Coast Boats with a Company Share Owner that have Either 1,2,3...Registered Share Owners.(Source; Register of Shipping and Seamen 1989)

No of Owners	All Boats	Under 40'	40 - 100'	Over 100'
1	9%	2%	26%	95%
2	22%	1%	37%	43%
3	48%	7%	54%	67%
4	57%	50%	56%	60%
5	59%	0%	59%	100%
6	42%	0%	50%	0%
7	47%	0%	47%	0%
8+	27%	0%	27%	0%

Table 13. The Percentage of North East Boats with a Company Share Owner that have Either 1,2,3...Registered Share Owners.(Source; Register of Shipping and Seamen 1989)

No of Owners	All Boats	Under 40'	40 - 100'	Over 100'
1	18%	5%	38%	95%
2	32%	0%	44%	50%
3	54%	6%	58%	63%
4	60%	0%	60%	60%
5	67%	0%	68%	100%
6	50%	0%	58%	0%
7	50%	0%	50%	0%
8+	33%	0%	33%	0%

involved in vessel servicing activities,not in fish processing. That they are more interested in gaining the service contracts with the vessels than actually controlling their activities, which they find intractable at the best of time, even when it concerns major financial decisions such as re-investment in, or replacement of, the vessel jointly owned. (see Thompson et al., 1983 and Deas 1981 regarding the separation of the different sectors of the Scottish Fishery.) Their findings accord with information that I obtained during the course of this research.

During talks with company representatives, with bankers involved in granting loans to the fishers, with an officer of the Sea Fish Industry Association and the fishers that I interviewed it was usually expressed that the fishers tended to be loyal to the agency that they attached themselves to, and that also had shares in their vessel, but that they were not in the least stopped from moving agency if the company did not go along with their plans and decisions or seemed to be failing in the services that they provided the fishers.

If control was the aim of investment then the companies with apparently the most to gain from such control, fish processors, have not involved themselves in any major way with investing in or taking shares in the boats,in the harvesting side of the fishery. This is quite unlike the fish processors elsewhere, such as Canada or the USA. (c.f.,Binkley 1989, Guppy 1986, regarding the investment of fish processors in boats elsewhere and the difficulties the processors experience in controlling them.)

Of course, it could be argued that the companies do have such control, by analogy to the circumstances of other units of capitalist organization. It could be argued, using the argument that company stockholders usually require less than majority stockholding to dominate the company within which they own stock, that the company shareholders do have such control over the boats in which they have shares. Such an approach has two logical difficulties. One it imports the so far apparently unsurmounted problem of proof of general involvement, let alone of day to day involvement, of the major stockholder in the affairs of the company that they are supposed to control. A particularly acute problem when control is being attempted over a number of fishing vessels operating 500 miles plus in a stormy sea that are all trying to locate the same uncertain catch. Two, it is not possible to advance such an argument while sustaining the theoretical positions of the determination, or the rationalization, of the control of production that frame it. The

attempt to save these theories is both the major reason for advancing such a thesis and also the theory that logically models the relationships supposed to be analogously involved.

Such discussion, however, takes us deeper into theoretical issues than is desirable at present. The main point that needs to be emphasized at the moment is that the majority of the most important category of vessels are registered to multiple rather than to individual or company owners. Sole company ownership, which in some cases was still fisher ownership, accounted for a very small percentage of the vessels in the most dynamic and productive category, the 40-100 ft class of boats, of the Scottish fleet in all areas of Scotland. The vast majority of vessels in this category have multiple owners and company involvement in the share owning increases proportionately to the total number of vessels as the number of owners increase. This ownership pattern, which previous studies and my own findings suggest involves minority, rather than majority, share owning in boats by fish selling agencies is highly problematic for social theory.

Conclusion.

This chapter began by differentiating three categories of fishing vessel based on their fishing methods, practices and income. The recording of fish landings by their catch method shows that the most significant segment of the Scottish Fleet was the 40-100 ft craft. The geographical distribution of these vessels is not uniform throughout Scotland; 75% of these boats are registered to ports on the Scottish East Coast (57% of these in the North East corner of the Moray Firth). This inequality was confirmed by the pattern of fish landings with the North East predominant in the landings of the demersal species which constitute the most valuable species for the Scottish Fisheries. However, the concentration of the best and most efficient boats and of the landings of high value species was not matched by the concentration of ownership of these boats in company fleets. The

ownership data obtained shows that even if all the fishing boats registered as solely company owned were owned by a single firm then they would still only account for a very small proportion of either the fleet as a whole or of the most important sector of it. The data shows that 72% of the fleet was registered to more than one owner (82% in the in the most critical North East sector) and that as the number of owners increased so did the likelihood of their being a company with a share in the vessel. Thus, both the history of the development and the current pattern of ownership of the Scottish Fleet presents something of a puzzle for the extant social theories of society.

Footnotes.

(1) If the average crew numbers for each category were multiplied by the number of vessels in the category this would give the following estimates of part-time and full time fishers in each category as follows; for the under 40 ft category approximately 3718 fishers and for the 40 - 100 ft category approximately 7273 fishers.

(2) By adding together the value of the fish caught by great lines, small hand lines, ring net and by drift nets for the under 40 ft boats and by adding together the value of that caught by demersal trawl, demersal pair trawl, industrial trawl and by seine net for the 40 - 100 ft boats.
(Scottish Abstract of Statistics 1986 p.170)

(3) This can be seen from the list of boats that land their catch at Peterhead and of their skippers and the skippers addresses in the Peterhead handbook for 1987.

(4) The figure for the West Coast was constituted by adding the various boats registered at Ayr, Ballantrae, Barra, Cambletown, Dumfries, Oban, Rothesay, Stornoway, Troon, Tarbert Loch Fyne and Ullapool. That for the Shetland Islands by the boats registered at Lerwick. That for the East Coast by summing the boats registered at Aberdeen, Arbroath, Banff, Buckie, Dundee, Fraserburgh, Inverness, Kirkaldy, Kirkwall,(for the Orkney Islands) Leith, Methil, Montrose, Peterhead and Wick. And a subdivision of the East was identified and calculated as the North East by adding together the boats registered at Aberdeen, Buckie, Banff, Fraserburgh, Inverness and Peterhead.

(5) Goodlad argues that the introduction of the larger vessels into the Shetland fleet were from the impact of the Norwegians using these purse vessels to pursue the herring more successfully than the Shetlanders who were fishing herring using the older and more fickle method of drift netting. His argument is that this a continuance of previous attitudes to innovation. That in the 19th century there were two fishing disasters when most of the Shetland fleet, who were fishing from open decked boats, were lost in a sudden storm whereas the outsiders, this time the other Scottish boats, who were using fully decked boats largely survived unscathed. These episodes led, Goodlad argues, to the replacement of the then old sixorns with decked boats.(c.f.,Goodlad 1971)

(6) I conducted cursory interviews with two clam fishers in the under 40 ft category of vessel who lived in and operated out of

Oban. They operated by themselves catching these shell fish by skin diving. One person swam to the seabed and scooped the fish by hand into small nets that were hauled to the surface when full by the other in the boat above.They combined this work with marine salvage, marine engineering,diving work,etc., etc., estimating that they conducted this on a roughly 50 - 50 basis between fishing and the rest.

(7) These indicate the fish landed in Scottish ports by all UK registered vessel and includes that landed by vessels from outside Scotland. The contribution to the totals by these other craft is such a small proportion of the total that for the present purposes they can largely be ignored.

What is more difficult to deal with is the East - West distinction: Boats from the East coast do land fish at ports on the West coast. This is particularly so for the pelagic fleet who have continued to follow the migratory pattern of the fish and land at ports in closest proximity to their catching. The bulk of the pelagic catch need to be attributed to the pelagic fleet that follow their prey, only two, 5%, of which are registered at West coast ports the rest are registered at East Coast ports and the Shetlands. Boats from the East coast that fish for shellfish also tend to land fish at West coast ports because substantial shellfish markets are located there. Boats from West coast ports do land fish at the East coast ports but having far more under than over 40 ft boats and their distribution down the coast, which makes the East coast ports far from their home port, means that the West coast fleet is more constrained from making frequent landings on the East. Thus, while the figures for landings at the different areas can be taken to be generally indicative of the contribution of the different fleets they do tend to inflate that of the West coast fleet and deflate that of the East.

(8) Information regarding the migratory hunting and landing patterns of the pelagic fleet was also given me by the pelagic fishers and officials with the Scottish Fishermen's Federation and the Sea Fish Industry Association in interviews and in personal communications.

(9) The North East landing figures were collated by adding together the landings reported for Aberdeen, Buckie,Fraserburgh, Lossiemouth, Macduff and Peterhead.

(10) The other west coast activities in demersal and shellfish are distributed more evenly throughout all the West coast ports.

Chapter 4. The Fieldwork: The Location and Structure of the Sample.

Introduction.

This chapter will first explain why Peterhead was chosen as the fieldwork area for this study. Then it will consider the structure of the sample by first, looking at the category of boat operated on; second, examining the age and occupational structure of the sample and pointing out the lack of discretion between occupations; and third, the ownership structure of the sample.

Peterhead as a Fishing Port.

The geographical location of the sample will influence the results obtained in any study of social phenomena. This is due to the local particularity of the social structure and the history of its development. This, however, should not be a source of concern that there would be any restriction on the general applicability of the results obtained. What is necessary is that the geographical location of the fieldwork needs to be carefully selected for its relevance to the proposed study. There is also a need for the information regarding the nature of the location, especially that relevant to the study material, to be distinguished, detailed and taken into consideration in the analysis of the field material. By detailing the aspects of the context of the fieldwork and their implications for the results, both the proposed explanation and its applicability beyond the geographical location of the particularity of the field work should be improved. After all, the particular location is situated within a wider geography and its social phenomenon will interrelate with other sets of social phenomena.

Peterhead is situated in the North East coast of Scotland and is one of a string of fishing ports that are situated on the that coast of Scotland that stretches from the Moray Firth down to Aberdeen. Each port has a long and substantial history of practicing fishing as a main source of livelihood and each has experienced varying fortunes in this practice at varying times in their history. Gray (1978) considers that fishing was pursued as a main source of livelihood in this area since the 16th century, Buchan (nd) noted that there was some fishing out of Peterhead much earlier but could find little historical evidence as to its extent. Whatever,from early on there had been considerable historical rivalry among these fishing ports to increase their trade and capture prominence in the particular fisheries of the time. The only constraint lay in their resources.

As well as rivalry amongst the ports there was also, and there continues to be, some overlap in the activities of the fishers living and working out of these ports. Indeed, part of the present prosperity of Peterhead as a fishing port derives from those with boats registered in ports other than Peterhead using it to land their catch and service their vessels. Consequently, the harbour, the market and the support services for the fishers have considerably expanded at Peterhead, especially in the last twenty or so years. The number of fishing vessels presently operating out of Peterhead in the three categories and their patterns of ownership can be seen in Table 1.

Peterhead, itself, has a long history of active association with fishing of one form or another. Initially, after some minor white fishing, Peterhead became a major whaling, and minor white fish, port. Whaling was supplanted by herring fishing and, to a lesser extent, white fishing during the 19th century herring boom. Now, Peterhead is the largest white fishing port in Europe with a lesser, though expanding, trade in pelagic fish and in shellfish.

For a considerable part of their history the people of Peterhead have developed a social structure of relationships and

Table 1. The Structure of Ownership of Fishing Vessels in the Peterhead Fleet 1989.
(Source: Register of Shipping and Seamen, 1989.)

Peterhed Registrn	No Owners of Category of Vessel in Fleet.						
		< 40		40 - 100		> 100	
No of Owners.	Total of Boats With:	No. of Boats With:	No of Boats With a Cmpy Share Owner:	No. of Boats With	No of Boats With a Cmpy Share Owner:	No of Boat Boats With:	No of Boat With a Cmpy Share Owner:
1 Owner	77	57	6	15	2	5	5
2 Owners	40	12	0	25	9	3	1
3 Owners	35	1	0	33	20	1	0
4 Owners	20	0	0	20	9	0	0
5 Owners	12	1	0	11	9	0	0
6 Owners	3	0	0	3	2	0	0
7 Owners	2	0	0	2	1	0	0
8 Owners	1	0	0	1	0	0	0
Total	190	71	6	10	52	9	6

culture befitting the way of life of the fisheries. The changes apparent in Peterhead over this time mean that these were not ossified social structures but were structures that were continually being developed, and are currently being developed, to meet current circumstances and/or create fresh opportunities. It could be equally said that these developments are not peculiar to the people of Peterhead; the influx of boats from nearby ports and their development evinces this.

While Peterhead has long depended on the fisheries for a major source of livelihood for its inhabitants, the port has not been solely dependent on this one industry. Concurrent with the fishing the port was crucial for the export of grain grown in the rich arable hinterland of Arberdeenshire and remains important in this today.(Buchan nd) The grain trade has helped finance the provisioning of facilities at the port although it has crowded the port at particular times of the year generating some inter-industry rivalry with the fisheries for the use of the port's facilities. While the fishers in the present express some resentment at this crowding, believing that they are the principal port users and financiers throughout the year, they have become accustomed to some inter-industry rivalry for port resources. The more recent arrival and growth of the oil industry has only added to this rivalry, nevertheless the fishers have taken this in their stride, too. Currently, planned developments are being undertaken in the harbour to increase the deep harbour facilities for the fishers with the intention of locating each industry in separate areas of the harbour. The inter-industry conflict is not confined to the port area, however, and is not so easily accommodated at sea, although there may be reason to believe that this is much exaggerated.[1] As Robert Moore (1982) testifies in his study of Peterhead the fishers are at the centre of a noisy, if not stormy, conflict with the oil industry.

It could be said that some of these features make Peterhead quite unique as a fishing port in the Scottish Fisheries as a

whole. Those are some of the same features which make it the largest fishing port in Europe where, perhaps, the most prosperous fishers in Scotland are either located or are attracted to land their catch; fishers who have also developed a far more extensive network of social and economic relations than anywhere else in Scotland. However, it is the location and/or landing point of the largest portion of the Scottish Fisheries. Similarly, all classes of boats and types of fishing can be found at Peterhead. Consequently, factors which may be thought to make the port quite unique also tend to make it representative of both the main part of the Scottish Fisheries and of the Fisheries in general due to the productive and financial importance of the Peterhead fleet and the cross-section of the fleet found there.

The Structure of the Sample.

The core interview sample is composed of 40 fisher from all categories of boat found at Peterhead and, in consequence, of the Scottish Fisheries at large.[2] Also,interviewed were 6 recently retired fishers. The main sample for analysis, though, was the 40 currently operating fishers and this was composed of two blocks of interviews undertaken during two periods over seven eventful months for the Scottish Fisheries. One, of 16 fishers, was undertaken during July 1988 and the other, of 24 fishers, was undertaken between November 1988 and January 1989.

The 40 interviews were completed were with fishers who fished on 35 individual vessels. The names of these fishers and their vessels are known but they will not reported here as to do so would compromise the confidentiality that was promised these fisher, and that was often anxiously asked after throughout the length of the interview: Identification will be restricted to the category of vessel from which the respondents originate and the numbers from the same vessels. In the under 40 ft category 2 respondents were from the same craft forming its total crew. In the 40-100 ft category 2 crew members from each of four vessels

were interviewed. Consequently, I have a broad range of information relating to fishers and vessels of 35 fishing units.

Having interviews from 35 vessels has the advantage of increasing the access to information regarding the ownership patterns, to a greater variety of fishing and, similarly of experiences of the fishers as met by the respondents than would otherwise be possible with a sample this size. However, while this was possible, and in most cases was so, it was not in every case. Information on the ownership patterns and debt-relationships of boats was not always forthcoming from subjects who were non-owning crew members. It seems that this was due to a regard for confidentiality to the vessel's owners since the reluctance to impart this information was not characteristic of the rest of any of the interviews and was usually explained by comments such as;" I don't know anything of that. You will need to ask the family/shareholders, that is their business...." Such reluctance did not square with the rest of their interviews nor of their knowledge of the financial position of boats other than their own.

The advantage of this broader spread of respondents is also a disadvantage as it restricts, almost to the point of excluding, the possibility of cross-verification of responses between crew members and, with that, the chance to differentiate similarities and dissimilarities in their understanding of the nature of the enterprise and the way of life. It is also something that would provide some purchase on the internal dynamics of the understandings of the crews. While this may be so, there are respondents from the principal occupations and there is no indication of major differences in either the understandings of, or the orientations towards, the fisheries, between respondents from either different occupations or vessel categories. Of prime importance, also, is information on the respondents' understanding of their situation, the fisheries and of their options and that remains an open possibility to uncover regardless of their distribution across craft. Lastly, there seems to be some cross-

boat mobility with the fishers moving through occupations or across boats as they travel their career ladder and/or improve either their income or conditions of work. There are reasons, then for seeing this spread of respondents as not disadvantageous.

The Age Structure and Educational Achievements of the Sample.

Table 2. The Age Structure of the Sample by Boat Category.

Age Band	No in Each Band by Boat category.			
	<40'	40-100'	>100'	Total
16-20	-	1	-	1
21-30	1	5	-	6
31-40	-	7	-	7
41-50	1	10	4	15
51-60	1	7	1	9
61-65	2	-	-	2

From Table 2 it can be seen that there are more respondents in the 41 to 50 band than in any other single band and that more more respondents are located in the over, than in the under, 41 bands. It can also be seen that there are substantial differences in the distribution across age bands among the craft categories; the under 40 ft and the over 100 ft craft are skewed towards the over 41 band. Before this is considered further it is interesting to consider the age distribution between occupational positions:

Table 3. The Age Structure of the Sample by Occupation.

Age Band	No in Each by Boat Category	
	Skipper	Deckhand
16-20	-	1
21-30	3	3
31-40	5	2
41-50	8	7
51-60	6	3
61-65	2	-

There are no skippers in the under 20 category, reflecting the experience requirement for training. The average age of the two groups is 42 for the skippers and 41 for the deckhands. Thus, there are no great differences between the age averages for both occupations and with the small and large craft having an older age structure the average age in the mid-range comes down to 39 and 38 for skippers and deckhands.

The educational attainment of the sample was largely uniform, regardless of occupational position or of the size of boat on which the respondent worked. Of the 40 respondents only two went on longer than the minimum legal school leaving age and obtained the qualifications enabling them to go to university and only one actually achieved this end and obtained a degree. In terms of education the sample was composed mostly of subjects who had no general qualifications which would normally take them beyond the position of semi-skilled in general occupational terms. As I will detail later, some did embark on apprenticeship training and fewer completed this to obtain certification. By and large, other than the fisheries specific qualification attained, the fishers in the sample could be considered mostly semi-skilled.

Those in the Sample with Relatives who were Fishers.

Table 4 displays the respondents with fisher relatives where it is apparent from that the majority of subjects had at least

Table 4. Respondents with Fisher Relatives.
(Skippers n=24 Deckhands n=16)

Occupatn	Respondent's with Fisher Relatives					
	1or More	GFather	Father	Uncles	Brothers	Cousin
Skipper	23	21	19	17	18	16
Deckhand	13	8	7	7	8	4
Total	36	29	26	24	26	20

one relative who were fishers at the time that they first became fishers themselves. However, there is a dissimilarity between the

skippers and the deckhands in that the deckhands have less specific relatives who were fishers than the skippers. This suggests that the skippers in the sample tended to be more broadly located within a network of kin relations than the deckhands. Indeed, later it will be made apparent that some of these skippers also own their vessel in share with their kin who assisted them purchase these vessels. While this is so there is no direct pattern of inheritance of shares in vessels evident among the skippers. This will be shown in the section on share inheritance but it is also evident in the pattern of relatives that the fishers had on the boat they first went to sea on; they tended to go to sea first, not on their father's boat but on a boat with no relatives aboard:

Table 5. Respondents who had Relatives on their First Boat.
(Skippers n=24 Deckhands n=16)

Occupatn	Respondent's Relatives on First Boat.					
	1or More	GFather	Father	Uncles	Brothers	Cousin
Skipper	12	-	9	2	9	1
Deckhand	6	-	4	-	3	1
Total	18	-	13	2	12	2

Barely half of the skippers first went to sea on a vessel where they had a relative and less than half on the boat with their father,which is not necessarily the same as their father's boat. Only six of these skippers and two of the deckhands first went to sea on their father's boat. While the fishers can be said to have followed other family members into the fisheries they did not all cross the threshold via a boat with kin onboard.

The Occupational Structure of the Sample.

In the orientations studies it is usual for variations in orientation, which correlate with different occupational position, to be identified. This was so in the Goldthorpe et al., (1968) and the Prandy et al., (1982) studies. The former minimized

the importance of these variations, arguing that instrumentalism dominated the orientation of all occupations regardless of any differences. The latter emphasized refined individual variation in orientation related to the individual's occupational position and their perception of rewards. It is so that there are important variations in authority and responsibility between the occupations of skipper and deckhand but, the lack of discretion in the boundaries between them, the method of distributing the income from the trips, the social organization of ownership of vessels and the interdependence which results from the nature of a small number of people working on a small boat in a hazardous and exposed environment together mean that the core of the orientations of the fishers in the sample is remarkably similar. While it may be desirable, for theoretical parsimony, to focus on one or two of these aspects to account for the uniformity in the orientation of the subjects this is not adequate for explaining the social organization of the Scottish Fisheries. The history of the different patterns of development of the shore owned, either landowner, curer or company owned, and differently operated vessels confirms that while they shared some of the above features of fishing they did not share them all and were not as dynamic or resilient as the share owned and share paying fleet. The meaningful differences are in the sample fishers' orientation to the fisheries and to the alternative occupations.

In regard to the under 40 ft category the average crew size is between 2-3 fishers, including the skipper for whom there is no formal, legal, qualification requirement for holding the post. The potential for there to be a range of occupations in this category of craft, formal or informal, is obviously very limited. Indeed, the subjects indicate there to be a central figure who is usually acknowledged as skipper, share owner,engineer, deckhand, etc., with the remainder of the crew being either a share partner or permanent or casual crew members paid by the share method. The one craft in the category from which more than one crew was

interviewed was a one in which both were joint owners; neither was formally qualified as skipper. However, one was jointly recognized as skipper, engineer, deckhand, etc., while the other was as deckhand, net mender, cook., etc. In this while there was a recognized skipper there was considerable overlap in the performance and experience of duties and responsibilities reported by both. Occupational indiscretion seems to be something of the norm for this category of vessel. The winter period, when the fishing is constricted by weather conditions, provides time when repairs and innovations are undertaken. Usually, given the size and fairly basic character of the craft and equipment, these are carried out by the vessel owners which reduces their servicing bills without reducing their fishing, earning time.

In the 40-100 ft category of vessel there were two subjects each from four boats; from two boats a skipper and a deckhand were interviewed and from the others deckhands were interviewed. It could be argued that the ideal would have been to interview a number of complete crews or, at least of a number of skipper-owners, deckhand owners and deckhand non-owners, from a number of vessels. Indeed, there is considerable merit in this. However, the possibility for comparative analysis of understandings and orientations between skipper-owners and deckhands remains a rich field of study, given the extensiveness of the interviews.

While there were these overlaps in the respondents' vessels there was also a number of vessels who operated jointly in pair trawling ventures and two others who operated as part of a single fishery company jointly owned by the skippers and their father, primarily, and other kin. I interviewed a pair of skippers in the first situation and two skippers and a deckhand in the second. I also interviewed two skippers who, although not fishing either in pair trawling or in a joint venture, operated very closely together and were well versed in one anothers affairs, operating as an informal business team. Thus outside the overlap in crew from the same craft I have responses from interviewees

who co-operated in their fishery activity in and/or onshore in their fishing/business affairs of their separate enterprises.

What was apparent is that, in all but one of the above examples of co-operation between vessels, kinship relations were important for many of the networks of social support that the fishers had developed and were integrated into.

The occupational structure of the sample is shown in Table 6:

Table 6. The Occupational Distribution of the Respondents.

Category Vessel by Length.	Occupation of the Respondents.				
	Skipper	Mate	Deckhand	Cook	Engineer
Under 40'	4	-	1	-	-
40 -100'	17	3	7	2	1
Over 100'	3	1	-	-	1
Total	24	4	8	2	2

From Table 6 it can be seen that there are more skippers in the sample than there are of any other occupational group. It can also be seen that most of the respondents are from the 40-100 ft category of vessel, although weighting in favour of this category befits their value (detailed in Ch. 2 and 3) for the Scottish Fisheries. This category is also dominated by skippers, but marginally less so than the other categories. Examination of the occupational patterning is required because if it is so that orientations and understandings correlate with the authority, responsibilities, experience of the various crew members, then differences in occupation should entail differences in these important factors and with them differences in the orientation and understandings of the occupants of these positions. However, the matter is not as simple as that. First, the boundaries between occupations are not completely discrete between the occupations. Second, authority and responsibility spread out from the skipper through the shareholders and on through the crew and are not exclusively located in any one position. There is evidence of participation in an extensive range of decision making by all of

the crew members in other fisheries studies (Byron 1986, pp.90-5 Cohen 1987,Goodlad 1972, Norr and Norr 1978, Thompson et al.,1983, Wadel 1972) and in my own material, more than there is evidence of in the numerous studies of work. Third, the same studies indicate that more informal relations exist between the skipper and the crew and that there are interdependencies amongst them for their application of their skill and knowledge to be a safe and effective unit. Both work to reduce any gap between the skipper and the deckhands. Fourth, income stratification, if there is any, is between vessels and between shareowners and non-shareowners. Income is, as detailed in Ch.2, distributed by the equitable share system. These will now be considered further.

Firstly, the boundaries between occupations are not entirely discrete because there are few, if any, tasks exclusively undertaken by any occupation and there exists a degree of interchangeability of personnel amongst occupations. The skipper often mucks in with the deckhands on deck, in all classes of vessel. The mate works in the hold packing the fish after they are caught and are processed and is frequently qualified to, and does, on occasion, substitute for the skipper and a number of the other crew members are so qualified, as will become apparent when the qualifications held by the subjects are detailed. Also, some either illegally operate as skippers, or find qualified fishers willing to work as paper skippers only. To obtain the necessary qualifications to be skipper there is a prerequisite for the candidate to have had prior experience fishing as a deckhand.[3]

While upward occupational mobility has some dependence upon the possession of qualifications, downward mobility has no such prerequisite. A number of the respondents for this study reported working at positions below their current one and/or their qualification level for periods. This was usually reported as being due to factors such as loss of boat, being between the sale and delivery of a new vessel, awaiting repairs to their boats, injury to a deckhand, or temporary or permanent

dissatisfaction with the position and responsibilities of skipper. While this is obviously not the same as constantly working in, 'being stuck in', a lower occupation it does represent occupational experience and the fluidity contrasts with normal practice of other factory practices, capitalist methods.

More indiscretion is apparent in the other occupational boundaries. The most discrete boundaries are those between the engineers and the deckhands but even here the range of tasks that the engineer performs overlaps with both the skipper, e.g., working as a driver, and the deckhands. The cooks also work with the deckhands when not cooking, although there is less expectation on them to do repair work when the boat is in the harbour or en routes. The cooks, as did some of the deckhands, reported working as cooks for a spell and then as deckhands and as cooks later; no formal qualification is required for this post.

Thus, it would seem that from the responses that I elicited from current and retired fishers and from the evidence of other studies that the boundaries between occupations are not completely discrete and that the crew on the share fishing boat operates as a team overlapping in their work tasks and areas of responsibility. These boundaries are at their most discrete between the skipper and the other crew and, legally, authority rests with the skipper. They are also a little more discrete with the engineers. For neither the skipper or the engineer is the discretion complete, either at the beginning of careers or continuing through them. Consequently, in the close knit environment of a small fishing boat at sea there are differentiated occupations but no entirely discreet patterns of occupational experience and the fishers are paid, and can own the vessels, by the share system which contextualized this pattern of relationships within a structure of equity of return for responsibilities. At what might be called the bottom line, all fishers face and experience common and substantial risks in which they bear mutual responsibility and gain a more common and

substantial return which reflects the performance of the vessel than the fixities of a regular wage allow for.

Secondly, the centre of authority and responsibility resides, firstly, with the skipper, from whom it emanates outwards to the mate, the shareholders and on to the crew. The skipper makes the most decisions about the operation of the fishing vessel; when to sail, to commence fishing, to stop fishing, when to return to port, when to undertake repairs, refits, adopt improvements, reinvest etc., etc. Regarding, improvements and repairs to the vessels, all of the deckhands reported that they would have no hesitation in making recommendations for repair work or improvements to the vessel or equipment and that they had made such suggestions. They also stated that they thought there was a high possibility of their suggestions being acted upon if they were good suggestions. With the more substantial or long term investment decisions, consultation focused on the skipper, the shareholders and actual and potential lenders. In this case the skippers, the shareowners, the lenders in the agencies, the banks and the Sea Fish Authority, and the deckhands that I spoke to all stated that the skipper was the principal authority. Thus, the authority and responsibility seem to centre on the skipper and issues out through the crew and shareholders, etc., each of whom have their areas of responsibility and authority of differing degrees. The fishing unit itself is the location of the greatest amount of authority and responsibility and gives off an image of being a more self-determining unit of operation than the descriptions of the shore based company owned vessels in studies of either the Aberdeen trawl fleet or the company owned fleets in America or Canada.(c.f.,Binkley 1990, Deas 1983, Guppy 1986, Norr and Norr 1978, Pollnac and Poggie jr 1988, Thompson et al., 1983, Tunstall 1969)

Before continuing it is useful to point out here that this very centrality of the skipper in the fishing vessel, for its operational, financial and investment processes is also of some

benefit for the analysis and explanation of the Scottish Fisheries. By successfully completing lengthy, detailed and candid interviews with this centrally located figure, in conjunction with like interviews with the deckhands, access to information concerning the operation of the venture is extended.

Third, decisions concerning the daily running of the vessel and working of the fishers are often taken in consultation with the crew. While, the skipper has absolute authority in law the fishers interviewed indicated that the crews would be dismayed or astonished if the skipper exerted this authority, especially if it was exerted offhand. (90% of the fishers reported that absolute authority resided with skipper but that most orders were informally given and many decisions were made in consultation. They also indicated that they thought the less successful boats had the most authoritarian skippers.) Skippers and deckhands both reported that they were dependent on one another performing with self-motivation and competence. They reported that they were given the freedom to get on with their job and that a crew needs to work together as a team that affords mutual assistance to one another. That competition on the boat, other than good natured, informal, competition, would not provide an efficiently operating craft. These reports accord with the findings of the studies cited.

Fourth, the share payment system has been instrumental in distributing the vessel's income equally, in most instances, amongst occupations. The inequality, or stratification, of incomes that can occur is that between shareowners and non-shareowners. consequently occupations themselves are not indicators of difference in the rewards obtained from fishing. They only achieve that status if a particular occupation, or occupations, entail the ownership of substantial shares in the vessel. The one occupation which generally entails shareownership is that of skipper: most skippers own a share in the craft they sail with. Where a skipper does not have a share an income supplement to

their labour share is generally paid them. This can occur either where a 'paper skipper' has been taken on to cover legal needs and reduce insurance costs or in the minority of cases where the vessel is wholly company owned.[4] However, while there is this positive correlation between skipper and either ownership or income supplement, ownership can also spread beyond the skipper to the crew members and/or kin. Kin appears to be a linchpin in this and to be important to share ownership amongst crews also. The pattern of ownership amongst the respondents will be detailed, for now it is sufficient to note that there is some share and income stratification in the sample.

Table 6, then, reveals the occupational distribution of the sample, wherein there is a strong representation of skippers. It is necessary to be fully aware of this because if understandings and orientations correlate with the authority, responsibility, rewards and experiences of the respondents then occupations are liable to entail variations in these. However, the occupational boundaries are not entirely discrete; the authority and responsibility on the fishing boat crystalizes in the skipper and spreads out through other occupations and shareholders in a manner of overlapping interdependence between personnel. Lastly, the greatest reward stratification occurs between shareowners and non-shareowners and only between occupations where some ownership attached. Income stratification remains between the non-shareowning skippers and non-shareowning crew, to some degree, because of the supplements paid to such skippers by the vessel owners.

While there is reason to consider occupational and ownership differences as important for understandings and orientations they may not cause differences in these. This is due to their relative unimportance and/or their fitting the responsibilities and common interdependencies, experiences and values of the fishers themselves. There can be a potential for greater gains than losses from having more skippers, who are also owners, than

other occupations so long as some qualitative comparisons can be made between occupations. This consideration of the patterning of occupations suggests that due to the lack of watertight boundaries between the mate, engineer, deckhand and cook that they be classed as deckhands. The similar lack of discretion between them and the skippers suggests something the same here but the tendency for skippers either to be shareowners or to have income supplements as well as their being a locus of authority, decision making and responsibility points to the possibility of the contrary and to continue to consider the skipper as a possibly distinct position on a fishing vessel. It is to be remembered that these occupations are not occupants; the latter report some movement through these positions in their career.

Distribution of Fishing Qualifications Amongst the Respondents.

Legally, to be able to command a fishing vessel over 60 ft a person is required to be certified to at least the level of full and special mate. There was no such requirement for vessels under 60 ft. To be able to study for a skipper's papers required

Table 7. The Numbers in Each Occupation with Skipper's, Full and Special Mate and Mates Certificates.

Current Position.	Number with Qualifications.		
	Skipper	F&S Mate	Mate
Skipper	16	7	10
Deckhand	4	2	4
Total	20	9	13

previous obtainment of one of the mate's papers. Thus, all who had skippers papers also had a mates paper. In the sample there were 16 fully qualified skippers and one full and special mate working as skippers. There were a further two who had commenced study but that they could not complete it because they were found to be colour blind; a skipper and a deckhand. After taking account of the four working on the under 40 ft vessel that left

four skippers operating without certification; two paid an insurance supplement as they worked 59.98 ft vessels, two employed paper skippers. There were 5 working deckhands who were qualified to work as skippers and who then were not so working. Thus, there were fewer qualified than working skippers and some of the qualifications were held by working deckhands.

In answer to a question asking why they studied for the qualifications that they had all who had commenced study stated that their intention was to be able to own and command their own vessel when they took up study. Six stated that their fathers were skippers and that they needed to have some life ambition and that they would take over their father's boat. The other 11 reported that they thought this study and intention would give them some ambition in life,advancement and independence. All who worked as skippers, certified and uncertified,expressed some satisfaction and pride at having achieved command of a boat and share. Two of the deckhands, certified to work as skipper, who had not succeeded in obtaining a vessel said they were not disappointed at this. The other 3 deckhands who had succeeded in obtaining a vessel and command stated that they found the pressure of the post too much for them, so they abandoned it. One of them cited additional conflict with his partner brother as the last straw. All 5 deckhands, however, reported occasionally working as relief skippers either on their current vessel or another where the skipper was ill or on holiday etc. The latter 3 stated that this was adequate for them, that they had no desire to do other than these short spells as skipper which provided enough satisfaction and fulfillment.

For 6 of the working skippers certification was unnecessary because 4 worked with under 40 ft craft and 2 with under 60 ft craft which was the type of fishing and size of craft that these skippers wanted. The remaining 2 working skippers said that they had no time to study and did not wish to lose the income for the period of study while also pay the fees when they did not

have to. Of the 10 deckhands explaining why they did not study for certification, while the youngest one reported an intention to study a little later, 2 cited the loss of income and fees as the reason, 5 cited satisfaction with the experience, rewards and responsibilities of deckhand, 1 was discovered colour blind and the last cited late entry to fishing and working as joint owning partner on an under 40 ft boat as their reasons for not studying.

The reasons reported both for and for not pursuing study reveal that there is a social structure of opportunity in the fisheries which facilitates the rise of some and impedes that of others and that these fishers have a fairly clear understanding of this social structure and their position within it. The prerequisites of health and work experience along with the cost, time loss and work incurred by study which impedes some from study, but not necessarily from career advance. Having a father who is a skipper with shares in a vessel can give some encouragement and assistance that can ease their career path. Although, as will be made clearer in the section on other occupational experience, this was not always so. Overcoming some of the obstacles and completing training suggests that the person has some degree of motivation and commitment towards the fisheries. As well as offering a particular set of experiences and rewards the position of skipper also entails a particular set of responsibilities and pressures which some fail in and/or shy way from. Similarly, the position of deckhand offers its own set of experiences, rewards, responsibilities and pressures that some find worthwhile and satisfying. This is also so when it is compared with a skipper's job. The fishers in these reports reveal understanding of the goals of the fishery's social structure and pursue paths therein for their fulfillment.

The Structure of Share Ownership Amongst the Sample.

The incidence of share ownerships amongst the sample is shown in Table 8: Of the 40 subjects 27 owned shares in the boat

they sailed with and 2 had shares in vessels other than this one.

Table 8. The Distribution of Share Ownership Amongst Occupants.

Share Amount	No.in Each Occupation & Category with Shares.					
	Under 40 ft		40-100 ft		Over 100 ft	
	Skippr	Dckhnd	Skippr	Dckhnd	Skippr	Dckhnd
2/16	-	-	-	1		-
3/16	-	-	-	-	2	-
4/16	-	-	-	1	-	-
5/16	-	-	1	-	-	-
8/16	1	1	5	-	-	-
9/16	-	-	1	-	-	-
10/16	-	-	-	-	1	-
12/16	-	-	3	-	-	-
16/16	4	-	4	-	-	-
Unknwn	-	-	3	-	-	-
Total	5	1	17	2	3	-

Table 8 shows that most skippers owned 50% or more of their boat while most deckhands owned minority shares. The one deckhand with with major shares owned these in an under 40 ft boat. The 2 skippers with 3/16th shares cumulatively owned 3/16ths shares in 3 vessels. Also one skipper, on a 40-100 ft boat, was a sole owner with shares in another that formed the other half of a pair trawling venture. Thus, all of the skippers in the sample were substantial shareowners, 1 of the deckhands was a substantial shareowners in an under 40 ft boat and 2 were minority shareowners in 40-100 ft boats. There is stratification in share ownership in the sample. If this is generally so for the Scottish fleet then there is stratification throughout the fisheries.

Restricting comment to the sample, this stratification between skippers and deckhands means that there is distinction between them in their ownership, authority and incomes. If this has consequences for their understandings and orientation they should be discernable in the responses of the skipper-owners

and deckhand non-owners to the questions in the questionnaire. If such differences are found in the skippers' and the deckhands' responses then they would seem to reflect something of the structural reality of the fishing boat. If they exist their meaning and affect need to be evaluated as such distinctions in the skippers' and deckhands' orientation,[5] according to the relevant studies, seem to have existed in the company owned trawl fleets that operated out of Aberdeen and elsewhere in Britain and to have been damaging for them. If no such differences are found in the understandings and orientation of the skippers and the deckhands then this would suggest that there is a unity in the social relationships, and in the dynamic, of the share fleet which did not exist in the shore company owned trawl fleets. It would also suggest that there is a concurrence in the understandings and orientations in the crews of share fleet that was not found in the staff of those company organizations whose forms were theoretically supposed to supplant the share form. (See the discussion of the national interest question in the debate concerning the trade unions in post-war Britain in Clarke and Clements 1979.) Support for such a congruence between the skippers and the deckhands emerged in the consideration of the histories of the Scottish Fisheries (c.f.,Ch.2 above). There is also support for such a view in some of the other studies of the Scottish and other fisheries, reviewed in Ch.4. Consequently, the division of respondents into skipper-owners and deckhand non-owners has some analytical advantage.

If no such distinctions in understandings and orientation can be found where these should be greatest and most apparent; where occupational position corresponds with differences in the share ownership of the vessels then it can be expected that no such distinctions will be found where occupation and ownership do not correspond. There should be no such distinctions between occupations either where the skippers are not shareowners or where the deckhands are shareowners. In this sense the question

of whether the sample is representative of the share distribution amongst the crews in the Scottish Fisheries is less consequential.

There are reasons to expect some concurring stratification of occupation and ownership in the mid-range vessels. In a situation where the average crew is 6 or 7, the skipper's central position concerning investment, repair and renewal decisions makes it more likely that the skipper will be a share holder, if not a major one. Also, where there are shareowners in the shore fish selling agencies and shore kin share owners, even minority ones, the potential for widespread shareownership within the crew is to that extent reduced further. The pattern of share ownership of the vessels in the sample is shown in Tables 9, 10 and 11, as reported by the respondents and confirmed by the Register of Shipping and Seamen.

It is apparent there that the skippers of the separate boats in the sample all have a share, of some size, in the boat with which they sail. The tables also show that most skippers, 29, have the largest single share in their vessels and that for three other boats the three skippers own the majority of shares amongst them. Of these, 4 skippers in the 40-100 ft and 3 in the under 40 ft category own their vessels outright and another 2 in the mid-range craft were heading in that direction with the assistance of a shore consortium. Only 3 skippers have a share smaller than the largest single share block in their vessels. One of these skippers was relatively young and their father owned the majority share. For the others ownership was amongst kin relations with the equal share owners crew members. The tables

Key to the Abbreviations:

Kin; Onshore relatives of a crew member who has shares in the vessel.

*; This mark beside a share value indicates that the share owners are related to one another.

Agency; This indicates the shares owned by a fish selling agent. This is normally the one that the boat is contracted to to sell its fish and supply provisions.

Others; Any other onshore investors who are not either kin or fish selling agents.

?; This mark indicates that the exact proportion held by the person is unknown. Where it is accompanied with >

this indicates that the persons share is larger than the other share holders.

Table 9. The Distribution of Share Ownership of the 40-100 ft. Boats in the Sample in 16ths.

Boat Code No.	Crew Owned Shares		Shore Owned Shares.		
	Skipper	Deckhands	Kin	Agency	Others
M.1	5*	2* & 5*	4*	-	-
M.2	8*	8*	-	-	-
M.4	?*>	2@ ?*	?*	-	-
M.5	9*	4* & 3*	-	-	-
M.6	?*>	?*	-	?	-
M.7	?>	2@?	-	?	-
M.8	8*	2@4*	-	-	-
M.9	8*	2@4*	-	-	-
M.11	?>	-	-	-	?
M.12	16	-	-	-	-
M.13	11*	5*	-	-	-
M.14	12	-	-	4	-
M.15	8*	4*	-	4	-
M.16	4*	4*	5*	3	-
M.17	8*	-	8*	-	-
M.18	?*>	?*	-	-	-
M.20	16	-	-	-	-
M.21	?>	-	-	-	?
M.22	⅓*	2@⅓*	-	-	-
M.23	16	-	-	-	-
M.24	8*	4*	-	4	-
M.25	12	-	-	4	-
M.26	?>	2@?	-	?	-
M.27	9*	3*	-	4	-
M.28	16	-	-	-	-
M.29	12	-	-	4	-
M.30	12	-	-	4	-

N.B:For M.11, majority shareowner buys out the others in 5 years.

Table 10. The Distribution of Share Ownership of the <40 ft. Boats in the Sample in 16ths.

Boat Code No.	Crew Owned Shares		Shore Owned Shares.		
	Skipper	Deckhands	Kin	Agency	Others
S.1& 5	8*	8*	-	-	-
S.2	16	-	-	-	-
S.3	16	-	-	-	-
S.4	16	-	-	-	-

Table 11. The Distribution of Share Ownership of the >100 ft. Boats in the Sample in 16ths.

Boat Code No.	Crew Owned Shares.		Shore Owned Shares.		
	Skipper	Deckhands	Kin	Agency	Others
L.1	3*	-	3@3+2@2*	-	-
L.2	3*	-	3@3+2@2*	-	-
L.3	3*	-	3@3+2@2*	-	-
L.4	10*	4*	2*	-	-
L.5	?> Kin owned:distribution unknown.				

show the importance of kin relationships in share holding; 20 of the vessels were owned in share amongst kin relations. The next most important share owner was the fish selling agency share who owns minority shares in 11 of the boats. Of the 35 boats in the sample, all have some, and 33 have substantial, share ownership by the skippers. This represents significant stratification of ownership that corresponds with the occupation of skipper which restricts the distribution of shareownership throughout the crew.

Another interesting point that can be garnered from these tables is that the skipper and/or crews own a majority share in 29 of these vessels. The remainder are majority owned by the fishers and their kin; the fishers were important shareowners for all of the vessel in the sample. Thus, the sample is an appropriate one for focusing on the social relations and experiences of working on fisher owned, share owned, vessels.

The Pattern of Share Inheritance Amongst the Respondents.

Four in the sample; 2 skippers and 2 deckhands, inherited shares in a vessel. Two of the skippers and one deckhand inherited less than 50% of the shares, and one deckhand inherited all of the shares, in a vessel from their fathers. One skipper was gifted 6/16ths of the shares in a boat by their father and another by their father and grandfather. One deckhand was offered a vessel by an unrelated fisher which he declined due to being colour blind and needing to employ a skipper to master it. Thus, in the sample 4 skippers and 2 deckhands either inherited or were gifted shares and one deckhand declined the offer of a vessel.

These results suggests is that perhaps the way that their kin tended to assist them to obtain a boat was not through inheritance or gift but by participation in the purchase of boats. Six of the kin shore shareowners and all of the substantial, 5/16ths and over, kin shore shareowners in the sample were the fathers of the skipper shareowners. There is further evidence for this in the section on the subjects' share ambitions.

Religious Affiliations Amongst the Sample.

Some of the studies of the Scottish Fishery reported that religion was particularly influential amongst fishers: that the fishers were very strong in their religious beliefs and, in the past, had been receptive to evangelical and salvationist crusades. (e.g., Deas 1981, Gray 1978, Moore 1982, Thompson et al., 1983) It was also reported there that the strength of the fishers religious beliefs were manifested in fishing boats always being in port for Sunday and the fleet leaving the harbour, en masse, promptly after 12.00am on Sunday night. While being mindful of the problems inherent in identifying and evaluating the influence of religion on people (see Shiner 1966, on secularization, for example) and of one of the findings of the orientations studies that the influence of social background factors declines with the

length of time spent in an occupation, (see chapter 6) it was decided to ask the respondents if they were members of any church, if they attended and how regularly that they did, whether they and their vessel fished on Sundays and why not if they did not and what they thought of Sunday fishing. Membership of religious organizations, as reported by the respondents, is shown in table 12, and their frequency of church attendance in table 13:

Table 12. Reported Membership of Religious Organizations.

Religious Organization	Occupation	
	Deckhand	Skipper
Baptist	3	4
Open Brethren	0	4
Church of Latter Day Sts	1	0
Total	4	8
	(N=16)	(N=24)

Table 13. Reported Frequency of Attendance of Religious Services.

Reported Church Attendance	Occupation	
	Deckhand	Skipper
Every Sunday.	2	5
Fairly Regular.	1	2
Sometimes.	1	1
Occasionally.	0	2
Never.	12	14
	(N=16)	(N=24)

These tables show that few profess strong religious beliefs in terms of church membership and/or attendance of services. Table 14 confirms this in the form of the few reporting restricting the number of days spent at sea per trip by desisting from fishing on Sundays due to religious reasons.

While 8 fishers did report not fishing on Sunday and 6 delayed going to sea until after midnight on Sundays, few appear to be

Table 14. The Reporting of Sunday Fishing Among the Respondent.

Sunday Fishing.	Occupation	
	Deckhand	Skipper
Do Fish on Sunday.	13	19
Do Not Fish on Sunday due to Religious Reasons.	2	4
Do not Fish on Sunday due to Other Reasons	1	1
	(N=16)	(N=24)

sufficiently affected by religious beliefs to actually allow these beliefs to restrict their fishing activities. It could, of course, be argued that religious belief does not always appear in actual activity; so the respondents were asked what they thought of Sunday fishing.

Those who did not fish on Sunday for religious reasons usually stated with brevity; a deckhand from an over 100 ft boat said:

> "No, our folk dinny fish on Sunday. They're Open Brethren and they go to church every Sunday. We're always back by Saturday at the latest. Usually we are home at the weekend and we never leave before midnight on Sunday. Sunday limits our trip length and that used to be the same for awe folk up here. That's there business, though...."

The 'our folk' this fisher was referring to were the boat's owners who attended church, as he did, every Sunday and who always returned by Saturday because of this. His attitude was, as was that of the skipper of this boat, who was interviewed at a quite separate time and place, that Sunday fishing was a matter for individual conscience and not for social reprobation.

The curious nature of the issue is revealed by a skipper from a mid-range boat who fished on Sunday but said he would prefer not. Very early in the interview, for no apparent reason, he suddenly embarked on the following:

> "You are destined to everything, God provides a way. I sold my boat. I just recently bought another one.... I had to buy one for tax purposes or my family would have lost everything we had built up. I was looking for a new boat to buy. I went everywhere. All down the East coast all over the West coast, to

England, up to Shetland, everywhere. I went into the mission and nothing. I was walking along the shore at Cambletown when I seen this fellow coming out of a pub and I just knew.... I approached him and he said there was a man inside selling a boat. Now it was very strange for me to go into a pub. It was very strange for me to be in a pub but, I went in and approached him... and bought this boat. Most people didn't think I could manage it in time [find and buy a boat before the end of the tax year]. I had less than a month to sell my old boat. It must have been intended. God meant me to do that...."

When asked he fished Sundays and what he thought of this he said:

"Yes, all my life...."

"I'd prefer if I didn't have to do it. Hopefully I will manage my new boat without having to fish on Sunday. If we were not to fish on a Sunday perhaps it would maybe take some pressure off the grounds but it would put more pressure on the market...."

The pressure on the market was the tendency for it to be flooded with fish and prices to drop at the end of the week when Sunday fishing was the exception. Thus, for this fisher, precedence was given to fishing practicalities over his, quite elastic, religious beliefs; God had intended for him not to pay tax.

Another skipper and a deckhand, from mid-range vessels, separately explained the more common thinking among the sample regarding Sunday fishing:

"Sunday is just another day for me. When you're at sea every day is the same. My brother Stephen won't fish on a Sunday. He would lay up in Shetland on a Sunday. This is exceptional now; years ago it was the common practice..."

"Yes, you have no option in a small boat; its down to the economics of it. You need to, you have no option. You used to be talked about for fishing on a Sunday, but the first boats to do it made a killing on the market; they spotted a gap. Now there is no gap in the market because everybody does it. Well, we could count on the one hand the number of boats that don't fish on a Sunday."

Thus, in the past fishing in Sunday was taboo but has gradually become the norm rather than the exception. What determines the time at sea is the prolificness of the fishing. Getting to the market at the optimal time for prices is another part of fishing strategy. Fishing strategy has precedence over religion and observance of the Lord's Day had declined among fishers in Peterhead. The parents and grandparents of current fishers were stronger in their religious beliefs and sometimes their beliefs and/or practices continued with their children, a skipper from a

40-100 ft, boat echoes these statements:

> "No, I never fish on Sunday. I've kind of nothing against other people doing it but I don't like it. My forefathers and father never did it so I don't. In the winter it is very difficult not to because the weather and the financial commitments. In the winter the weather is so bad and the only break in the weather maybe need Sunday fishing.... All my family were religious but I'm not."

Whereas, the retired fisher, quoted next again, reports, social sanctions were applied applied to those who fished on Sundays neither this fisher nor any of those who did not fish on Sundays for religious reasons, seen such censoriousness of other fishers appropriate. When asked if they were church members or attenders of religious service these three replied no, with the first two saying:

> "No. There was far too much religion up here. It was nothing but a lot of hypocrisy...."

One of the retired fishers, who had fished as skipper on a 40-100 ft boat, that were interviewed claimed to be the first to have fished on Sundays in Peterhead, immediately after W.W.II. He said:

> "Yes, I was the first to go Sunday fishing after the war. I was ostracized for Sunday fishing.... They were all hypocrites them that didn't fish on Sunday. They're all hypocrites them that don't fish on Sunday. Sitting at sea, the cook, the engineer and the skipper were still working. They used to push the clock forward on Sunday night. They used to move the boat back and forth across the international date line in order to keep fishing. I said we did it in the war and when we were trawling [on the company owned trawl boats] so why not in fishing here [out of Peterhead]. It was more economical to fish on Sunday; you could get a better price on the market for the fish....

Thus, among the sample only a minority reported membership of religious organizations, regular attendance of services and avoiding fishing on Sunday for religious reasons. Religion was seen as having greatly declined in importance among fishers and those who held strongly to religious beliefs were thought to be a disappearing minority. Indeed, there is an age difference in the respondents; of those reporting not fishing on Sundays due to religious reasons only 1 was under 50.

Conclusion.

This chapter began by explaining why Peterhead was selected

for the fieldwork. While some of the port's features may make it unique, its geographical and economic location in the important North East corner of the Scottish Coast means that it is central to understanding the social organization of the Scottish Fisheries. Next, the distribution of the sample across different categories of craft and posts on the boat, their age structure, educational and qualificational achievements was detailed. This showed that the sample was composed mostly of semi-skilled people.

Examination of the occupational structure of the sample revealed that the boundaries between occupation were never entirely discreet; that there were overlaps in the performance of duties and in responsibilities which reduced differentiation between occupations. That differentiation was greatest between skippers and deckhands yet even here considerable overlap was found. However, the situation whereby the skippers also tended to be major shareowners and the deckhands mostly non-shareowners meant that the most meaningful differentiation to be made was between these groups. This stratification in the sample provides an ideal basis for uncovering any differences in understandings which could be the possible source of conflict amongst fishers. Were no such differences found between these groups then there would be less likelihood of them existing in less polarized ones.

Footnotes.

(1) Two recent issues over which fishers are in dispute with the oil companies are a, the dropping or dumping of substantial pieces of debris in the sea which can ensnare and destroy their nets and b, the removal of redundant oil platforms, which they say can do the same. For the second the fishers claim that unless the platforms are completely removed they will present a permanent obstacle where fishing gear can be snagged and damaged are countered by two factors. One the memory capacity and precision of their navigation equipment gives fishers the capacity and navigational ability to record the location of and avoid these stumps. Two, there is some claim that the stumps become locations for species regeneration due to the fishers not harvesting them.
(2) There were another two groups of fishers from other ports interviewed; one group of four fishers from a boat in McDuff and one group of two fishers from Oban.
(3) The variations are indicative of important evaluations of work held by the workers which tend to be common to many studies of work and need to be noted for that regardless of Goldthorpe et al's interpretation. I intend to make use of these variations

where they are relevant to the analysis.
(4) This is 4 years as a deckhand before training for a mates ticket and a further 3 years experience prior to studying for a skippers ticket. It is possible to truncate this to a 4 year period and study for what is described as a full and special mates ticket which qualifies the individual to operate as a skipper within a restricted category of vessel and are of sea. What these requirements mean is that everyone must work at least a minimum period as a deckhand prior to becoming a skipper.
(5) One example of this was reported by a skipper respondent who was paid an extra 1% of the boat's gross income for taking out a boat that a fish selling agency had acquired when the venture had become insolvent. With the labour share and this bonus this skipper accumulated sufficient to place a deposit of £15000 on another vessel and own it, with the help of a shore business consortium, within a year.
(6) It must not be forgotten that orientation is a plan for and inclination to paths of action. In this it forms the basis for the skipper's relationships with the crew members and the manner in which they exercise their authority. In providing such a guide the orientation must take account of the circumstances of the context and the wider relationships in which they are embedded.

Chapter 5. Becoming Fishers: Some Remembered Career Perceptions and Choices.

Introduction.

Something of the fishers' reported perceptions of their career choices at the time of their leaving school and the reason they advanced for becoming fishers will be examined in this chapter. In doing this I will suggest that their reasons indicate something of their initial orientations towards the industry and the structure of opportunity that they perceived themselves to be facing at that time. Firstly, how many subjects who did or did not become fishers immediately on leaving school will be detailed. Secondly, the sample will be grouped into those who reported desiring to immediately become fishers, those who gave some reason for postponing entry and those who said that they had no desire to become fishers when leaving school. The reasons given by those desiring initial entry will be examined as these reveal aspects of an initial orientation to fishing. Next, the reasons given by those reporting postponement will be considered to indicate how these further illuminate an initial orientation and the nature of the fisheries. Consideration will then be given to this group's intermediary occupations. Finally, the respondents' perceptions of the structure of occupational opportunity that they faced upon leaving school will be detailed to show the patterns that emerge corresponding with either their age, their position on their boat or whether they inherited shares.

Why Become a Fisher.

Most of the respondents reported having made the choice to become fishers at their school leaving age from within the range

of choices they thought available to them. As social actors they first consider their employment or further education prospects open to them when they were leaving school. From considering their reasons for, or for not, becoming fishers at this time some of the facets of their initial orientations to, and expectations, of the fishery can be garnered. Also, to be garnered from these reports are impressions of the interrelationships between kin and community and the fisheries within the broader social structure. It is at this stage in their life cycle that the attitudes and understandings that those who either immediately or subsequently became fishers had developed towards both the fisheries and to the available alternatives, were first applied in practice. As such it is important and interesting to ask the respondents for their reasons for what they did at this time, despite the likelihood that their memories will be incomplete.

Most of the respondents became fishers either near to, or immediately upon, leaving school and therefore reported having decided to become fishers at an early stage in their life. While those who became fishers at that stage had come from a fishing family and or fishing community there were others who despite sharing that common kinship and/or community background and being confronted by the same pattern of occupational opportunity did not become fishers then. Amongst those with whom I had discussion of the fishery there were 7 people[1] associated with the fisheries so situated who had not become fishers and 4 interviewees who selected other occupations then in their life.

The seven said that they did not become fishers partly at the insistence of their fathers who wished them to follow other career paths. Three of the four fishers who did not originate from either a fishing family or community reported that they did not consider the fisheries as career possibility at that point in their life cycle. The fourth cited a slump in the fishery as the main reason for not wanting to enter fishing then.

The fishers who wanted to but did not become fishers upon

leaving school they spoke of their father pushing them to work, at least temporarily, in another occupation. Something of the nature of the fisheries can be discerned from their reasoning; its proneness to fluctuating fortunes and danger were reasons they gave for their parents wishing them to postpone entry. Also, their position in the family structure was a reason given by some; if the person was the youngest son either or both share inheritance and the family structure of the crew (explained later) were given as supplementary or alternative reasons for them being pushed away from the fisheries. Whatever there is a suggestion that the immediate kin are fundamental factors influencing these fishers' career choices.

Legal requirements for education locates the earliest point at which career choices can be acted upon or have to be made in Britain. For the subjects here that was between 14 and 16 years of age, only 3 of the sample remained at school beyond this. The choice of occupation or career at this point is the outcome of processes not yet fully determined. Nonetheless, it is useful to consider this process in terms of the subjects' expressed desires and outcomes as these will help illuminate their understanding of their present situation. The following matrix details their expressed preferences and their occupations when leaving school. Of the 40 subjects 26 reported that they wanted to become fishers when leaving school and did so, 10 expressed having had a similar desire, but did not immediately pursue or achieve that ambition and 4 said that they did not wish to become fishers when laving school; they took other work and became fishers later.

Initial Occupational Desires and Outcomes Reported by the Fisher Respondents. N=40.

Initial Occupational Outcome.	Stated Initial Desired Occupation.	
	Fishing	Non-Fishing
Fishing	26	-
Non-Fishing	10	4

Attention will be given a, to the reasons expressed by all the fishers for their becoming fishers, b, to those who expressed a preference to become fishers on their leaving school but who did not then do so and the reasons that they now give for that, and c, to those who did not initially wish to become fishers but who have subsequently become fishers. Of the sample 22 expressed a single reason and 18 multiple reasons: categorized as follows:

① Their immediate kin relations, the community and their childhood upbringing; their initial socialization.
② The potential for good monetary rewards in the fisheries.
③ The intrinsic rewards of the occupation and the way of life itself.
④ The opportunity to enter the industry arising for,or being created for/or by them.

The reportage of these is shown in tables 1 and 2:

Table 1. The Reasons Advanced for First Becoming Fishers.

Category of Reason Given	Number in each Occupation advancing Each Reason.	
	Skippers	Deckhands
First	15	10
Second	10	4
Third	8	9
Fourth	4	3
	N=37	N=26

Table 2. The Fishers Advancing 1,2,3 or 4 Reasons Together for Becoming Fishers.

Category of Reason Given	Number in each Occupation advancing Each Reason.	
	Skippers	Deckhands
First	15	10
Second	10	4
Third	8	9
Fourth	4	3

The first category of reason was expressed either on its own or in combination by 22 fishers (14 of the fishers who expressed the desire to and who entered the fisheries immediately upon

leaving school). This category indicates overlap between home and the fisheries and accords with later responses to question concerning the respondents' attitude to their children becoming fishers.[2] The first category suggests that the fishers' initial orientation towards the fisheries is situated within their upbringing and experience of the fisheries and their community background. The following quote from a skipper from a 40-100 ft boat expresses elements of this aspect of the initial orientation.

> "There were a lot of good jobs at the time, but fishing was all I wanted to do. All my family were in fishing; my father and brothers were fishermen. All my family were fishermen. It's just what you are brought up to. When I was a young boy I used to go down to the boats in the harbour. It was all I saw at the time. My father used to take me out in the summer holidays. There is a lot of freedom in the fishing, not like in a 9-5 shore job... you're not tied down in fishing...."

Fishing was an activity pursued by this fishers' immediate kin and was something that he was brought up amongst and was immersed in from an early age. A walk took him to the harbour to watch or go on the boats and sail from in the summer holidays. He not only was told about fishing by his family but also had some personal experience of it. A deckhand on a mid-range vessel expressed similar sentiments:

> "I come from five generations of fishermen, it was always there, it is in the blood. Most people have red and white blood cells, the fishermen have red, white and blue blood cells; the blue is the sea. And I didny ken anything else. If you want to know my hobbies, then it is gardening, propagating plants and flowers. That's what I want to do when I retire, maybe I could start a nursery then...."

The skipper and deckhand shared a similar understanding of why they became fishers at that point in their lives; both were raised in fishing households, both went fishing while they were still at school and both seen fishing as part of their families' way of life. Of the 14 who solely expressed family background and personal experiences as their reason for becoming fishers 9 were skippers and 5 deckhands.

The second category of reason given for becoming a fisher would seem to accord with the image of the instrumental worker of the Affluent Worker study or with Lenin's or Ingham's

economistic worker. However, only 1 reported this in isolation. In all 36% of the skippers and 18% of the deckhands reported this reason. Surely, given the capital assets, qualifications and positions of the skippers, this is a reversal of the expectations entailed by the aforementioned interpretations; that propertyless deckhands should be more expected to say money is their reason for becoming fishers. A deckhand, from a mid-range boat, said:

> "My father had a share in a boat with his brother-in-law and there was no room for me. I had a twin brother and my father didn't want me to go to sea. I was not that keen on going to sea, so I became an apprentice joiner and served two years of my time. I saw and said that I could do anything that my brother could and the money was better at the sea. I was sea sick for 6 months. The boat was full of an old crew that was smoking bogey roll and the smell in the cabin was awful, with that and the fish and all.... There is a big difference in the boats now; we have carpets on the floor and videos....
>
> Fishing is a tradition in my family; my father and grandfather were fishermen. It was all they ever spoke about in the house. The loft was the net store and we all did our bit. I would have been a fisherman had there been no money in it. I can tell you stories back to 1911; I knew a lot about fishing before going to sea.... I was really groomed for the sea and didn't realize it...."

If there is thought to be a typical route into the fishing it would probably be that of a son following his father into fishing. In some respects a son doing that can be considered as confirming the value of a father's career and life in the son's estimation. This fisher did not follow that path because of the tensions in his family situation. His father was a joint share owner in a vessel with his brother-in-law, who also had sons, and this fisher had a a twin brother who was given preference in going to sea. Perhaps if this person had been a younger brother there would have been a place later or he could have accepted being passed over more easily. This not being so generated tensions from his desire to become a fisher and being passed over.

What made this situation worse was the social context within which the fisher's childhood was spent. Fishing was central to the household, as he later said it was now in his. The house was part of the fishing enterprise, though differently from now.[3] He participated in this as a child and felt groomed for the sea. This fisher's upbringing had been steeped in the fisheries but

the investment of other kin and the preferential treatment given the twin brother turned to jealousy and this fisher acquired a place on another vessel to that of his kin to prove his own worth and match the brother's income, abilities and achievements in an occupation that he had been raised amongst. This fisher did so to the extent of suffering 6 months sea-sickness in an uncomfortable boat with an old crew. Apparent in this quote is the social structure of opportunity within the fisheries and strategies for circumventing any obstacles that are encountered and that favour other occupations. Also apparent is a strong tenacity in wanting to become a fisher. The social upbringing of this fisher, the relative income and experience of the fisheries made it difficult for him to accept accept the other occupation in its stead. Thus, what may be a fairly idiosyncratic situation reveals something of the route into the fisheries and the alternatives. Family background may lead to an easy progression into the fisheries but, with the early experience of fishing it gives, it can generate a tenacious desire to become a fisher.

The next, by a skipper on a mid-range boat, has similarities:

> "I didn't think about it... My friends were in fishing, I thought the financial rewards were good. I thought there was a good standard of living in it. All my family were fishermen before me. Living in Peterhead offers you a good opportunity if you want to be a fisherman...."

A quote from a deckhand from this boat class will conclude this:

> "....No, fishing was all I wanted to do. My family were fishermen and I had the opportunity and the money was good... It's what you are brought up to... I mean it runs in the family, doesn't it?"

In the above quotes the relative monetary returns were given as the reason for becoming a fisher, along with wanting to become a fisher and family background.

The way of life, which includes the intrinsic rewards of the occupation, was the third reason given for becoming a fisher was advanced by 3 fishers on its own and by 17 in conjunction with another. Again any theoretical expectancy that those with no capital, fewer responsibilities and a lower income would focus on

money more than on the intrinsic rewards are contradicted; less than half the skippers gave the way of life as a reason while more than half of the deckhands did. The respondents often had first hand experience of fishing, both off- and on-shore, before leaving school and reported enjoying the intrinsic qualities of the activity; the means to the ends appear to be as important as the ends of catching fish and making money. A deckhand from a mid-range vessel replied:

> "The fishing was poor at that time [1949]. It was so poor that all at my time tended to get a trade. My father told me to get a trade behind me first. I went crying off to do my time. That was the trend at the time; 6 of the crew are all ex-tradesmen.... I always wanted to go to sea all my days.... fishing was better. In those days people followed their father's footsteps more than now. All my friends wanted to be fishermen, they all wanted to be big to fit a fisherman's jersey and they wore them at school and chewed chewing tobacco to be like fishermen...."

The next skipper on a mid-range boat also reported the intrinsic qualities of fishing as one of the reasons for becoming a fisher:

> "I was not really interested in anything else. I wasn't interested in anything other than fishing. It just seemed to be the thing done and I didn't want to do anything else than fishing. The life looked good to me.... I'm not qualified for anything else. I was not interested in anything else."

And a deckhand from a mid range boat replied:

> "The fishing...that was all I wanted to do. It was the way of life and the money that I wanted. I liked working with my hands, I'm good with my hands. The sea and the fishing were for me...."

Neither of these fishers wanted to be anything other than fishers and neither had much trouble achieving this, coming from Peterhead. They were attracted by the way of life of the fisher which included the intrinsic qualities of the job; working in the irregular on-shore off-shore patterns of time and intensity of work. They wanted the life at sea. But, in making this choice some constrict the range of opportunities to fishing because of lack of alternative experience and/or qualifications. But not all; some have alternate employment experience and the general state of the economy is influential. A well qualified skipper, fishing with an under 40 ft boat, who had worked on all classes of craft said:

> "My mother didn't want me to go to sea, she pushed me to go to

university. She said I could go to sea after university, if I still wanted to. I could have done anything because my qualifications would have allowed me to. I went to sea immediately after leaving school. When I was at university I went to sea during the summer holidays and the weather was fine; I worked out of here from the jetty at the end of the road. I have also been at sea in the bigger boats.... (Here he gave a detailed description of the work practices and routines of these bigger vessels.) You always get conditions that are bad. You are sick initially, most are, there are always conditions when you will be sick, but you get used to it, usually after about 6 months.

It's a way of life, I don't like sitting in an office or being told what to do and I don't like telling others what to do. That's why I work on my own now...."

This quote, and his descriptions of the different methods and routines of fishing, emphasize the life and work of fishing and his particular preference. This fisher had a strong desire to become fisher, to the extent of controverting his family's wishes and suffering the initiation of severe sea sickness (which this and another fisher described as akin to repetitive dying until they had gained their "sea legs"). He wanted to go to fishing immediately on leaving school, and did temporarily before entering university. During vacations and after university he went fishing as he preferred the life. He preferred the independence and freedom, the irregular work patterns and the excitement that comes of a good catch and of skilled sailing. This fisher was now a day tripper, but for most their time at sea is greater than their time ashore; compared to most shore workers their work-leisure, work-home life pattern is inverted. The fisher's life style is more determined by their occupation than those who spend more time absent from work.

The final category of reason given for becoming a fisher was that the opportunity to get a berth on a boat arising for, or being created by, the prospective fisher. This was reported by 4 skippers and 5 deckhands, all along with other reasons for becoming a fisher. A skipper from a mid-range craft replied:

"...I was invited to join a drifter, I was not related to the crew but I knew them. Also, fishing looked good... fishing looked like a good job to me...."

This was given along with extensive discussion of the nature of the fisheries at the present and of the need to give this

decision to become a fisher more serious consideration then, in consequence of the problems then being faced at the time. A skipper from a mid-range vessel responded:

> My big brother had a boat and offered to let me in on a share. My mates had an influence too; they were home from the Merchant Navy [as he was at the time] and they were going into the fishing. I'd always thought I would go into fishing, it was a more interesting life, but... I wanted to see something of the world first... It was only a matter of time before I took a berth on a boat and they persuaded me to do it then...."

In this fisher's case it would seem to have been the interplay between experience of the fisheries when he was young, interest in it as a way of life, connections with family and friends and the opportunity arising to join a step up the career ladder in the form of share ownership that caused this person to become a fisher. The Merchant Navy was reported by him to be a temporary occupational choice prior to entering fishing; the latter was the long term aim and the opportunity became available.

This reason for becoming a fisher sheds some light on the opportunity structure within the fisheries. Having a father or near kin who are either skippers or fishers, being the first son, having close friends who are fishers, coming from a fishing town like Peterhead and the fisheries being in a prosperous phase all ease, if not encourage, entry into the fisheries. Those not so placed would find it less easy or attractive to become fishers. Anyone so placed and who comes to the fisheries late in their careers would be more likely to enter into the under 40 ft class of craft where the conditions are less comfortable and the income lower. This was the case with 3 of the respondents in this boat class; they desired a late, dramatic, career change and this was the route to take. The fourth reason is a facilitative one which can be having some positive inclination to fishing and the simple opportunity of being in the right place at the right time and the need to overcome these obstacles to entry.

The reasons advanced for becoming a fisher has revealed something of the fishers understandings prior to entry as well as of the fisheries' social structure of opportunity. It has also

revealed something of the interconnection between shore social relationships[4] and the fishing vessels. It has shown that these fishers, as children, were immersed in, and connected with this way of life and its social structure in a variety of ways which were sometimes in conflict: They had intimate contact with the fisheries as the life style of their parents, relatives, and others, and they often had intimate and enjoyed contact with the actual activity of fishing prior to entry. This immersion acquaints the prospective fisher with the pattern of life where more time is spent at fishing than away from it, which is an inversion of the more usual time relationship between work and other activities. The immersion also acquaints the prospective fisher with the social praxis, of fishing and the income that it can provide. Their reports suggest that, for them, this fostered a positive valuation of fishing. Yet, despite this contact they may be badly placed to become fishers because they were not the eldest, of the crewing of their fathers boat, of the investment pattern in the vessel and/or the cyclic state of the fisheries. Nevertheless, being raised in a fishing milieu often provided the stimulus, as well as the means, to overcome such difficulties.

The possibility remains, however, that the response I have elicited may be a post factum rationalization of a choice that was basically made necessary by the absence of alternative occupational opportunities. Positing the question in that way, though, requires that the fisheries be shown to be in some ways seriously undesirable as an occupation and a way of life for those who adopt it. The fisheries being, in some ways, dangerous, arduous and sometimes unrewarding does not provide sufficient reason to conclude that they are undesirable; engaging with and surmounting such can be rewarding itself and there is evidence that the fishers are constantly working at developing and improving their technologies and practices. For their replies to be shown to be post factum rationalization of necessity requires that fishers are imposed upon by work routinization and poor

living standards that they otherwise would not wish. However, this has not been shown; early experience of fishing seems to have inspired a strong desire to become a fisher among these fishers rather than dissuading them. While, to be explained later, some of the respondents parents attempted to direct them into other occupations, due either to the fishery's cyclic tendencies or to their situation vis a vie their boat and not to disliking fishing.

Those Postponing or not Desiring Immediate Post-School Entry into the Fisheries.

Further light can, be shed on these initial understandings and the structure of opportunity of the fisheries from examining the responses to questions concerning the initial occupational choice of those who did not enter the fisheries on leaving school. Their understanding of their situation and the other occupations that they pursued at that time will help illuminate what the fisheries were being compared with and whether they were being compared more or less favourably with the fisheries.

The careers the interviewees pursued are not explicable solely by the person originating from a fishing household or town. There is no automatic sequence such as that children of fishers become fishers. While most of the respondents were the children of fishers raised in a fishing town, not all were and not all who were became fishers on leaving school

Resolution of this question of the diversity rests on the context of operation of the Scottish Fisheries. In social theory this context is normally described as a market, or a capitalist, market economy. However, while there is some agreement on the nomenclature there is little agreement on the specifics of this economy; there is little agreement on the structures, processes and consequences of such an economy except that it tends to be subject to cyclic fluctuation and uncertainty. Why the market is so subject is not fully explained either by economic theory, which usually ascribes the fluctuations to externalities to the

theory itself, nor by social theory in general. Nevertheless this economy is agreed to be subject of fluctuation and there is historical evidence for it if not theoretical explanation. As for the Scottish Fisheries there is historical evidence of it suffering the same cyclic tendencies as the British economy in general. Over and above this there is evidence of it suffering cyclic tendencies peculiar to itself, such as the fluctuation in species; i.e., the herring gluts and dearths in the 19th century and the current ecological crisis in stocks. The limits of knowledge of the reproductive and migratory behaviour of fish stocks leaves the fisheries in an undesirably exposed position.

The reasons for the diversity in the pattern of social practice towards the fisheries relate to historical experience of the, sometimes extreme, cyclic nature of the fisheries and the perceived available alternative occupational opportunities. The reasons advanced for postponing entry fell into three groups:

① Near kin pushing them away from the fisheries.
② The fisher having a preference for postponement.
③ Not wishing to become a fisher.

The first may seem perverse given the preceding reasons for entry. However, experience and/or sensitivity to the cyclic tendencies of the fishery by those who invest in and/or work in the fisheries may cause them to encourage their progeny either to gain qualifications or train for an alternate career. The alternate career, itself, may be considered as preferable to the fisheries at the time or as offering a fallback at a later date if the person does become a full-time fisher. The near kin are increasingly likely to adopt such a stance where the person concerned is not their senior child, where there is no room in the fathers boat due to the crew being composed of relatives with too many children, where there is insufficient or no share ownership to ease career prospects and/or where the fishery is in a downswing. In these circumstances the parents may forcefully push the alternative of gaining educational qualification or occupational experience that can either offer a temporary or

permanent alternative to the fisheries. However, some difficulty and/or conflict can be expected in this situation where there is an otherwise positive orientation towards the fisheries with the child resenting the parents attitudes and action and either not following the proposals or doing so only very reluctantly.

The second may seem equally perverse where the person comes from a fishing background. The explanation might equally relate to the cyclic nature of the fisheries, the then current cyclic position of the fisheries, the condition and pattern of wider occupational opportunity. The persons occupational orientation to or away from the fisheries can be usefully subdivided into: (i) A desire for qualifications or training and experience to provide some insurance against the cycles. (ii) The desire for an alternative career to fisheries because of recession.

The third was not having been raised in a fishing port and/ or not having near kin or friends who are fishers. Two consequences can flow from this. First, those living in a fishing port may have a positive orientation towards the fisheries derived from their friends and visits to the harbour but lack the connections and opportunities to get a berth where informal recruitment procedures seem to operate.[5] Where there are few occupational prerequisites informal channels and contacts gain in importance. Second, the person may have no positive orientation towards the fisheries or be ignorant of their specific nature, practices and work skills because of not being located in a social environment conducive to their acquisition. In both cases the subsequent fisher is also located within a wider context of occupational opportunity with some range of alternatives.

Of the sample 16 did not become fishers immediately on leaving school; 7 did not become fishers for the first reason, 6 for the second and 3 for the last. The current occupational posts of each is of interest: In the first category, where the parents sponsored an alternative option, there were 2 skipper owners and 5 deckhands, in the second there were 3 skipper owners and 3

deckhands and in the last there were 2 skipper owners and 1 deckhand. Looking at qualifications the picture is different: In the first category there were no qualified skippers, both were unqualified skippers who, nevertheless, commanded their craft. In the second group there was one qualified and two unqualified skippers and in the last,both were unqualified skippers.

Before anything positive can be discerned from this some further information is helpful. In the first two groups 12 were sons of fishers and 2 were not. Also, only one of the fishers in these groups only was the elder son, he was in fact the only son. The situation of the majority was confirmed by the share inheritance, or the lack of it, reported by the respondents; none of them reported inheriting any shares. One further factor is of interest; in the first group 5 of the respondents thought the fisheries were in a slump when they left school, the other 2 reckoned it was not depressed and offered good job prospects. In the second group these figures were 4 and 1 respectively. In the third group 3 thought it was so and 1 said they had no knowledge of the fisheries at that time. The age groupings of these fishers correspond with their perceptions; i.e., those from the same age groups had the same perceptions of the state of the fisheries. In summary, it would seem that most who postponed entry were not the senior child and that most thought that fishing was in a slump, offering constrained opportunities when they left school.

One of the deciding factors for those who postponed their entry would seem to be constrained opportunity in the fisheries; rather than suggesting they were forced into the fisheries by limited alternative opportunities they seem to be saying they were obstructed from entering the fisheries by either or both the cyclic state and their linear place in their families and forced into other posts. Both their replies to my questions of why they took the other jobs and the length of time that they spent in them offer some confirmation of this interpretation.

A fisher, quoted above, said his father ordered him to another

post, the next deckhand, from a mid-range craft, said the same:

> "I wanted to go to sea, I wanted to be a fisherman from when I was very young. My father was a fisherman and he wanted me to get a trade behind me first but that was not my idea... Fishing is in the blood, you are brought up to it. It's the way of life up here; you get towns folk and fishing folk and they are very different. My father wanted me to have a trade behind me and then I could go to sea..."

Resentment was expressed in these reports of the near kin pushing their children away from the fisheries: if no resentment was expressed then the veracity of their reports could be doubted.

The second grouping of personal choice leading them away from the fishery, at least temporarily, should not contain such resentment;the choice was their own. Nevertheless, here also there was some expression of dismay in the manner that they described making these choices and their frequent location of the fishery as in slump at the time. Similarly, the time that they spent in their alternatives prior to becoming fishers was relatively very short. Of the first only 2 completed the minimum time necessary to gain certification before becoming fishers. In the second only 2 worked beyond two years and completed training which is quite contrary to expectations had they freely chosen to do this. The cyclic position of the fishery and that they were not the eldest son realigns these stated desires and subsequent actions as they said they took up fishing after being offered a place and the fishery was picking up. This suggest that they had postponed entry into the fisheries and that their initial orientation to the fisheries was stronger. However, their actions also left them a more constrained set of future prospects than they would have been had they concluded training.

Four fishers in the sample said they had no initial desire to become fishers: 3 of whom, who had not come from a fishing background, did not consider fishing as an option when they were leaving school and only came to fishing rather late in their career. One said they entered fishing to escape an undesirable employment situation and the second to said they wanted to escape depression in the industry where he had worked:

"I seen there was a depression in the oil industry [where he had worked for over 15 years] I seen there was a future in the inshore fishing industry. I thought I would do that along with some survey and salvage work as well... We also have a guest house business that is mostly run by my wife in Peterhead...."

This was the sole case of occupational pluralism, or multiple occupations, that I encountered in the interviews in Peterhead, although I encountered and spoke to two west coast fishers in Oban who combined shell fishing with salvage and marine engineering. The third spoke of interest in the freedom and variety that fishing offered along with being attracted through marriage. The last fisher in this group explained his choice of an alternative career as deriving from the fishery being in depression at the time and did not look attractive for a career at the time. Later, when the fishery picked up, a place on a good boat became available and he accepted. Within this last group, not coming from a fishing town or family was crucial in their assessments and choices. The one who did come from a fishing town cited depression to explain not becoming a fisher then.

Perceptions of the Structure of Occupational Opportunity.

Central to the theses of disadvantaged traditional modes of production outlined above is the argument that those working at these modes are there because of limited opportunities. It is contended that they work at these modes because either or both 1. that there are few alternative options available to them, 2. that the alternatives which are available are dismally poor. The subjects' perceptions of the extent of the economic options available to them and what type of work did those not entering fishing immediately upon leaving school take will now be examined.

To get some impression of the respondents perceptions of the variety of options that were available to them at the time they were leaving school and first thinking of work options they were asked if they thought there were very many, many, few or very few jobs open to them at that time. Of the respondents 22 indicated that they thought the work options available to them at the time

of their leaving school were quite limited; 11 of these said that they were very few options open to them and they suggested that their options were limited to fishing. Of the 18 others, 12 thought that there were many jobs available to them when they were leaving school, and 6 that there were very many available to them. Of these groups there is no difference in their perceptions of their job opportunities that correlate with their occupation or share ownership situations. The one identifiable correlation was in their ages: Those whose perceptions were that there were few or very few job options available to them when they were leaving school were either under 25 or over 45 years old. Those whose perceptions were that there were many or very many jobs available to them at that time were between 25 and 45 years old. These age bands located those with impressions of restricted opportunities as leaving school either before 1956 or in the late 1970s to 1980s and those whose impressions were more optimistic were leaving school between the late 1950s and early 1970s. Thus, while the majority perceived there to be few or very few options open to them their perceptions related to their time of leaving school. What is of further interest is that those whose perceptions were of very few options also perceived their access to the fisheries as also so constrained, half of these, 6, cited taking other jobs, as a second option, only until they could get a fishing berth. While all came from the same part of Scotland there perceptions of the range of options open to them were affected by the state of the economy and the fisheries.

To get further impressions of the types of jobs that the respondents perceived as available to them they were asked what was their first job upon leaving school and to give examples of the range of jobs that they perceived as available to them when they were leaving school. Of the respondents 15 took jobs other than fishing when they first left school, 24 entered fishing then and 1 pursued further education obtaining a university degree. Overwhelmingly, the alternative pre-entry, to the fisheries,

occupations pursued by the respondents with such experience, and those offered as considered available to them by the respondents without such experience, were occupations with apprenticeship training in one of the skilled trades. Of those with alternative pre-fishery experience 9 pursued apprenticeship training, one did so in the merchant navy. Of the remainder of this group four did short service in the merchant navy, one worked at what he termed a stop gap job in an electrical store until he could get a fishing berth and the last worked on a farm. The alternative occupations primarily pursued on leaving school were mostly apprenticeship ones leading to skilled occupations.

Those with alternative pre-fisheries experience, who also thought there were many or very many jobs available to them considered these other jobs to be primarily apprenticeship ones. Of those without other pre-fisheries occupational experience, 22 offered jobs with apprenticeship training as the alternative to the fisheries available to them when leaving school, 6 of them indicated that they had declined offers of these types of post as they wanted to become fishers. The other jobs posited as available to them at their time of leaving school by the respondents were the merchant navy, onshore jobs associated with the fisheries, work in the oil industry, work in the Crosse and Blackwell food processing company, or work away from Peterhead in Aberdeen or England, e.g., in the steel works or car factories. Of the 11 who had stated that they thought there were very few alternative jobs 4 advanced a few alternate jobs in their reply, 7 said there were no other jobs to the fisheries available and 5 of the 7 said their options for the fisheries were also very, if not more, limited at that time.

The majority of the respondents considered there to be few or very few options available to them when they left school and some considered their options in the fisheries more constrained than elsewhere. While some gave no alternate options and some only 2 or 3 the latter and the rest overwhelmingly indicated

occupations with apprenticeships as the ones they either took or considered primarily available alternatives when they were leaving school. These were the ones that those who took or were offered these jobs forewent to become fishers in the first instance. These were the type of jobs the others considered they principally forewent to become fishers in the first place.

Conclusion.

This chapter first examined the respondents perceptions of the range of occupational options open to them at their time of leaving school. The majority thought this range to be to some extent limited. However, those who did so often also considered the fisheries to be also so constrained and or volatile in its fortunes. Some took alternative posts either because they were unable to get a berth on a fishing boat or because there was some plan to provide a fall back alternative to the fisheries. The situation that the respondents describe is not of the simple one of their being forced into the fisheries because of the lack of alternatives; some felt forced away from the fisheries. Why they felt thus were further expressed in the reasons they gave for becoming fishers. The reasons revealed that most were steeped in the life style of the fisheries and that they had some practical experience of it as children which made it attractive for them; the fisheries appeared to offer interesting work and a good standard of living. While the alternatives were thought limited by many, the alternatives that the fisheries were evaluated against were those of skilled occupations either viewed from the outside or from actual experience. It was these that were sometimes abandoned or rejected for the fisheries and it was these that fishing could be considered primarily evaluated against at that point in the prospective fishers life. These can not be considered unworthy jobs without undermining much of the argument that portrays small scale producers as disadvantaged; as such they can only be made to look unworthy to the extent

that this undermines the argument of exploited, disadvantaged fishers. They can only be made look unworthy to the extent that they make the fisheries look more attractive and in so doing undermining the thesis of exploited, disadvantaged, producers.

Footnotes.

(1) These were 7 people working in offices and companies servicing the fisheries. Their occupations were: 1 ice factory worker, 1 accountant, banker, 1 Sea Fish Industry officer, 2 oil supply workers and 1 fish salesman. While none were ever full-time fishers, only having been fishing for individual trips, they all expressed some admiration of the fisheries and wonder at how how their lives would have been had they become fishers. Each said they had not become fishers principally at the insistence of their parents who thought the fishery too unstable.
(2) The responses that the fishers gave to the question of what they would think of their own children becoming fisher, a question which is frequently cited as an indirect measure of job satisfaction,(c.f., Blauner 1966) were all positive. There were no negative replies so long as that was their children's own wishes.
(3) In this fisher's childhood the household was part of the production unit, in part because their vessel was smaller than the one that this fisher worked on then. The centrality was that of their discussing fishing at home, of fisher friends visiting, of the way that the temporal routine of fishing was important for the family life style as was the income from fishing.
(4) These social relationships are sometimes addressed in social theory through the concepts of the family or the household, although not without severe definitional and/or functional differentiation problems.
(5) The reports of the fishers themselves and others that I spoke to concerning the fisheries indicated that the recruitment procedures were informal and made by recommendations from other fishers and friends,word of mouth or advertisements on the notice board of the local Fishermen's Mission.
(6) Certainly, something that must not be forgotten is the extent to which the range of options reported are also the consequence of the level of educational attainment, or the lack of it, of the subjects. While this is important for both occupational choice at and continuously after leaving school and, therefore, for the fishers ability to choose from a wide range of occupations when leaving school and to be able to transfer to another occupation should conditions in fishing become undesirably severe, it is also important to remember that school educational attainment is also influenced by the occupations aimed for, even although it will constrict the range options that can be later pursued. In short, educational attainment is also part of the person's perceived occupational desires and is not solely a major determinant of occupational outcomes and fortune.

Chapter 6. The Fisher Respondents' Orientation to their Current Way of Life in the Fisheries.

Introduction.

Given the crucial location of the fishers in developing and sustaining the social organization of the fishing boats the orientations to work approach will be outlined as means a, to focus more sharply on them in a context of perceived opportunities and organizational options and b, to ground their reports within a wider theoretical and evidential framework.

It will be shown that orientation to work has been seen as concept and model. As a concept it has been formulated as single faceted but that both problems of explanation and the findings of the orientations studies point to a multi-faceted conception being more accurate. As a model, orientation is seen as an ordered relationship among other conceptualized phenomenon; it is argued that some of these are better viewed as expressions of the orientation rather than its product. Further, the studies point to occupations being composites of conditions and rewards that are hierarchically structured: thus occupational evaluations are likely to be made between composites and should be examined thus. While they are composites the findings of the studies point to them not being evaluated in a compensatory fashion; that high levels of some feature compensate for low levels of others. Rather, they point to the relatively absent features being a source of discomfort. Many of the studies point to some aspects of an orientation being the product of, and, in some senses, being constrained by, reality. Here, some of the methods developed by these studies to overcome that constraint will be used but the variability within fishing performances will also be argued to be

a source of space in the subjects' evaluations which transcend the usual constraint of reality. The conclusions from this summary will be used to sketch a multifaceted orientation for the fisher subjects based on their replies to the interviews. This will be done to show that the findings of the orientations studies point to absences of facets desired of work in other work environments, due to the way that work is socially organized, and that that is assessed so by these fishers giving them reason to increase their commitment and motivation to a fisheries providing more of them.

Lastly, a hypothesized explanation of the social organization of the fisheries based on this orientation, on the technical requirements of fishing and the social networks within which the fishing boats are embedded will be proposed.

The Orientations Approach as an Aid to Explaining the Fisheries.

The origin of the orientations approach is in the Marxist attempts to explain social consciousness on the basis of social and economic progress; for Marx, as Bernstein noted:

> "...man is by nature an active, productive animal.... who cannot survive unless he produces -exercises labour power- in order to maintain himself. This essential productive dimension of human life is praxis. But the social forms that this labour takes are historically conditioned." (1971, pp.62-3.)

This historical conditioning defined labour making it important as an object of study for Marx. Labour, nevertheless, for Marx, was essentially a unity; it was both a project and a process:

> "....At the end of every labour process, we get a result that already existed in the imagination of the labourer at its commencement." (cited in Bernstein 1971, p.43.)

Consequently, for Marx work was a type of social praxis foreseen in the imagination prior to its realization in practice. Work, in this sense, was an expression and affirmation of humanity as well as being essential for human reproduction. Where capital and labour were unified social praxis was complete there was reason for people to strive to retain or restore this complete social praxis of planning and execution. Also, as many theorists note, social actors have formulated understandings and concepts of

their activities which are important for their actions.

Insofar as fishers have done so, and they are, in some manner and degree, successful in reproducing their way of life these conceptions need to be considered. The fishers' understandings are the basis on which they commit and apply themselves to that specific life and social organization. Both these understandings and the social organization motivates and assists the fishers to confront and surmount difficulties in ways superior to those with other social organizations of the fisheries. Furthermore, those in alternative organizations of production and employment to and for the fisheries also have understandings of these organization. Not to consider the fishers' understanding brings about the absurd situation of working to expand understanding while disavowing actors' understanding. The orientation approach offers a practical way to comparatively assess the fisher's understanding of the fishery and of the alternatives.

Previously orientation has been seen as a concept; discrete conceptual phenomenon, and as a model; as a set of relationships among a number of other conceptual phenomena. As a concept, it was discerned as either a single or multifaceted phenomenon. As a single facet phenomenon one feature sought at work dominated and defined the orientation. As a multifaceted phenomenon no single feature of work is thought so determinate of the orientation. As the former a single determinate facet was considered to be what motivated and committed people to an occupation, as the latter a number of facets are considered to do so. As Prandy et al., noted:

> "Attempts to demonstrating the over-riding importance of one particular reward as a motivator in the employment situation have the advantage of conceptual economy, but they have failed. Indeed, the partial success of each has made it clear that a variety of rewards must be considered." (1982 pp.4-5)

They, and Blackburn and Mann, pointed out that rewards often posited as defining an orientation, i.e., money, outdoors, status, etc., were actually rough indicators of the coexistence of other aspects. This was because occupations are hierarchically structured, so that rewards and conditions tended to co-increase,

and were not compensatorily structured, so that less of one was compensated for by more of another. Also, the studies proposing a single facet orientation generally found that other facets were sought at work and that their absence was a source of discomfort for their subjects. In looking for comparative occupational evaluations logically multifacet evaluations are being made and should be looked for of the fishers.

Orientation has also been conceived as a model explaining the causal relationship amongst various conceptual phenomena, e.g., rewards, wants, expectations,perceptions, preferences, importance, satisfaction and total satisfaction. Sometimes these have been seen as effects of orientations whereas it is more accurate and informative to see some as the expression of an orientation and as thereby revealing it. If some of these are not taken as revealing an orientation then the orientation becomes something always beyond the perceptual horizon, observed only indirectly through its effects on these other conceptual forms which it is supposed to be guiding. As such an orientation becomes a value, or value set, in the mind of the social actors akin to a manipulating sub-conscious value, or value set, that is detached from the context of its evaluative application. The orientation is socially dislocated and, thereby, made inexplicable by reference to its practice and context of application. Were it not so detached it would integrate with, and thereby be discernable through, the context of its application. An orientation composed of some of these phenomena is grasped as a process of evaluation of a situation whereby contextualized intentional action can be pursued. Thus, for example, the facets reported as liked or satisfying of a situation and that are disliked, dissatisfying, the preferences within the range of opportunity of a situation, are reports of the operation of the orientation. Prandy et al., for instance, define orientation as:

> "...the expectations and priorities that people have in regard to the rewards available at work." (1982 p.78)

Central to this definition is the concept of reward, but:

> "It is scarcely novel to treat human beings as reward-seeking, but a major problem has always been that such an approach has tended to lead either to tautology, in that any goal pursued can be understood as a reward,or to vagueness, in that no simple formulation can cover the wide variety of goals and rewards that people pursue,or both. The present treatment attempts to avoid these problems by specifying in advance a limited range of rewards that individuals seek at work..." (ibid.,p.4)

Along with the problem of excessively limiting the rewards examined, and perhaps the definition of them, there is another problem; that of restricting intentions in work only to the rewards it provides. As intentional action work and the specific occupation pursued is a project, that is part of a life project, that can be successfully pursued or not. Parsons,(1951) for example, recognized this when he wrote of an orientations system. It is possible to regard all achievements, in particular and general projects, at work and their concordance with the general life project as reward achievement. It is not possible to do this without transforming rewards into tautologies. It is more informative to investigate what respondents seek or prefer. Limiting the subject's attention to rewards, to a small range of them, is inappropriate for examining orientations to the fisheries as it omits important features of the fisheries; it is preferable to approach their orientation through open ended questions and allow that they may be pursuing a set of features of the fisheries as social praxis, only part of which are rewards.

The orientations model is an intentional, socially located, model that requires the expression of wants and the exercise of choice within a social context. Thus, there is a distinction to be made between desire and expectation; if orientations are what constitute understanding of the social world and work then they determine what is required of it and, also, expressions of satisfaction. If repeatedly, uncomfortably, compromised by social reality orientations cease to be expressions of desires and choices exercised, becoming simple cognizances and acceptance of what is. Another view of this is that thus orientations cannot account for change in attitudes and actions. Inherent to the

model is a distinction between desires and expectations. Complete dislocation, though, cannot provide practical understanding for evaluation or action. The fishers' orientations need to be, and evaluated as, expressions of their desires or expectations realistically located, without being distorted or overly-constrained by that location. This difficulty is partly met by comparing fisher's incomes with average earnings, partly by considering the respondent's assessments of the future and partly by the variability of the fisheries.

Questions which request respondents to evaluate the future take them beyond, in some way, present circumstances. In Prandy et al's study subjects were asked to asses their future living standards. Chinoy specifically investigated the consumption and other ambitions and, sometimes wistful, dreams of his subjects. Goldthorpe et al., asked their subjects what they aspired to ten years on. Here, the fishers were asked about their career ambitions: about their current occupation and qualifications and why they achieved this, whether and why they aspired to share owning, what they were doing to achieve this if they did, and, why, if they did not. Also used were questions of desires for ten years on, of what the subjects expected of, and recommend for, the fishery's future and assessed their children's future.

The fishery's history is of considerable variation in its fortune, whereas orientations studies generally examined workers in more stable routine situations. That fishers face substantial variation in the results of individual trips and in general prosperity and ecological context, while confronting the same hierarchical occupational structure as the subjects of these studies, means that their expectations are not so restricted by reality. That the fisher respondents reported experiencing considerable variation in the fishery generally means that their reports contain elements of desire so far as they have knowledge of good and bad fortune in their fishing experience and incomes.

Another concept in the model is importance, the importance

of work, its rewards and conditions to a person. The problem is in how to access the importance of work for a subject. Goldthorpe et al., attempted to access importance through preferences and the subject's reasons for having them, Blackburn and Mann through preferences and their respondent's ranking aspects of work in descending order of importance. The latter thought importance central to orientation but could not get their subjects to rank aspects of work; despite expressly requesting them to relatively evaluate features, in individual reports they found many ties for the most important feature. Prandy et al., suggested that this ranking technique was conceptually ambiguous:

> "...first... it confuses... general importance, that is the overall significance of work in providing for various needs, with what we shall refer to as salience, that is the extent to which, given the individual's current situation, a reward acts as an actual or potential motivating force for behaviour. The second confusion is linked to the first and to the problem raised earlier in respect of expectations, of the ideal versus the constrained and realistic. This is the implicit assumption that all rewards can be pursued on the basis of wants... and a failure to recognize that their availability is highly constrained. The voluntaristic assumption of the existence of free individual choice thus underlies both confusions, since by ignoring the second distinction it tends also to dissolve the first." (ibid p.84)

Two issues were raised here. First, salience was conceptualized as the power of a reward to motivate a person, later they measured it as the priority for a small increment by requiring respondents to order rewards as they would first, second, third, etc., most welcome an increment. As a measure it was of the relative dissatisfaction with rewards, with dissatisfaction the motivator. But, as their own analysis shows a number of rewards are either equally or similarly important for respondents, as is the desire for improvements in them, in which case differences amongst rewards are being created or amplified. Furthermore, the small number of rewards to select from, that they offer, could mean the measure was not of the most important conditions or rewards for the respondents. This is especially likely for jobs, like fishing, with strong occupational identities.[1]

Moreover, the measure was of specific rewards in a specific

frame of reference; it was the desire to obtain a small increment in a reward and not the importance of either the rewards selected nor of all the available or principally sought rewards. However, as Blackburn and Mann found, evaluations and importance vary with the frame of reference; they vary to take account of the circumstances being addressed by the person. In this sense what is of principle importance for one set of circumstances will prove to be less so for another set. Rather than than reinterpreting their respondents' varying replies as indicative of weak orientations Blackburn and Mann would have been more consistent with their general insight interpreting them as bundles of desired/undesired conditions cumulatively revealed through all the questions. Albeit, they noted there was a sense in which importance and preference were similar; both were constitutive of an orientation and were not variables dependent upon an orientation as abstract value(s).

The second issue is that aspects of work come in bundles, the precise makeup of which actors have little or no control over or ability to make refined choices amongst fitting their personal constructs of importance, relative or otherwise. This requires actors to prioritize some rewards and conditions over others according to availability, rather than preference. With the structure of occupations being hierarchical, rather than compensatory in terms of rewards and conditions, choice is made more confined and necessary. Salience, Prandy et al., hoped would deal with this constraint while marginally surpassing it by asking subjects to indicate their priority for increments in rewards, these being the ones most motivating for action. Here arose the idea of free choice. Free choice must not be confused with uncontextualized choice; for context offers the resources and reasons for choice. It is necessary for social actors and theorists to be aware of the causes and consequences of the limitations of freedom. Such awareness is a potential source of social change and a reason for pursuing social theory. General

importance also motivates; as occupations are composites of conditions and rewards and are perceived thus by people, the composites are the basis for comparative motivation and commitment to occupations and organizations. Likes, dislike, job histories and preference questions; asking respondents to comparatively evaluate jobs had and/or available to them, offers the best approach to detailing this evaluation.

The single facet orientation model posits a compensatory, marginalist, model of the relationship between aspects of work. The defining aspect, i.e., more money compensates for the absence of, and reduces the expectations for, other rewards. However, in the studies there is little evidence for this and much pointing to the opposite; that aspects missing or in low availability remain sources of discomfort and aspects obtained remain desired. Prandy et al., for example, found a partial compensatory relationship only for promotion which reduced the expectations for, and salience of, other aspects. Otherwise, better conditions and higher perceptions of them increased the expectations and salience of other rewards. The major causal factors they found were the levels and perceptions of rewards for expectations and salience. There was no evidence of a satisfactory compensatory ordering either of expectations or desires for improvements in rewards. The evidence was more that as the attainment of a reward increased, increasingly fulfilling the expectation for it, the desire for more of other rewards increased, not decreased. After testing a model, where orientations were seen to arise outside the work environment, and a model, where attainment and perceptions were intervening variables, Prandy et al., concluded that the latter was superior for explaining variations in expectations but that neither were very good for explaining the desire for <u>improvement</u> in a reward. This finding, though, tends to return the source of the orientation to the work situation more than it being the product of aspects removed from that situation as was the original view of the explanatory power of it.

The final concept of the model to consider is satisfaction. There are many studies which focus primarily on job satisfaction and it is usual that, regardless of significant variations in the conditions and nature of the work, these studies report moderate satisfaction for their subjects. Blauner(1966) suggested cultural bias and respondent's seeing direct satisfaction questions as personally challenging explained this apparent paradox and that more oblique questions needed to be used. While satisfaction studies do generally record moderate satisfaction those that research more than one occupation mostly record meaningful variation in the levels and patterns of satisfaction reported that accord with occupational position. Satisfaction studies of fishers usually found such variation accorded with differences in ownership and control of vessels and income distribution. Goldthorpe et al., approached satisfaction obliquely through job preference questions and reasons. Both Blackburn and Mann and Prandy et al., did so by obtaining answers grading the levels of satisfaction with their respective range of items. Both found satisfaction was grounded in the subject's situation. The variability of the fishery does not present a constrained routine certainty; it offers prosperity and depression and fulfills as well as smites dreams. As noted, variation in the experience and incomes of the fishery can be quite extreme between trips and seasons, therefore there is distance within the reality of the fisheries that provides some variation in perceptions and space for expectations and satisfaction. As well as being situated within the context and concerned with fairness satisfaction is also situated within such experience and conception of change and of life project; here some of the distance between the obtained and the obtainable, between reality and wants is found.

Prandy et al., found strong correlations between satisfaction and the other conceptual factors in the orientations model; an inverse correlation between it and salience and expectations, and a positive one between it and perceptions. Most interesting of

these that higher perceptions of intrinsic rewards, as control and use of abilities, increased the satisfaction recorded with all other rewards and that satisfaction with a reward was also conducive with a desire for more of that reward.

Prandy et al., point out, total satisfaction, which is usually considered an indicator of commitment, is actually a cause of commitment. This interpretation is more logical than the ulterior one that commitment increased satisfaction with a given set of conditions. That incurs a need to explain commitment and tends to dislocate commitment from its object. Both interpretations point, however, to a positive correlation between satisfaction and commitment. Prandy et al., found that satisfaction with intrinsic rewards and with promotion input most into total satisfaction and that the only other influence came from the perceptions of intrinsic rewards:

> "The results of this section on satisfaction indicate very clearly the importance of two major factors. One is the nature of the work task, as this is given by the two intrinsic job rewards: use of abilities and control. This aspect of work contributes more than any other to total satisfaction, and even spills over into satisfaction with other aspects of the job. This is true also of promotion... a belief in promotion acts as a means of coming to terms with the present situation because it holds out the prospects of personal change within the existing structure of the organization leading to increases in future rewards." (1982 p.135)

The importance of intrinsic rewards is in line with the many other studies of work which, with the causal efficacy found for them and promotion, leads to their being considered of central importance. Thus, for this study, questions were introduced which enquired of the fishers' perceptions of their level of control over their performing their tasks and the resources for, and the conditions of, the performance of these tasks. The interpretation offered by Prandy et al's findings is that higher perceptions of obtaining these would strengthen the fishers' satisfactions and, thereby, their commitment to the organization perceived as providing them.

The Facets of an Orientation to Fishing.

Based on the above review of the orientations literature and

on the respondent's replies to the questionnaire an orientation with four facets is being proposed for the fishers. This is being done on the basis a, that occupations are composites of features, b, that the conclusions of the studies point to people wanting a multiple of features of their work environment and to their not being comfortable making compensatory evaluations of the composite available to them and c, that different aspects of the orientation are revealed in relation to different contexts and questions which suggests that different aspects are brought into play according to their relevance to the situation or question. This latter aspect points to an intelligent use and cumulative revelation of orientation. The four facets are: Ⅰ. Success - Progress, Ⅱ. Freedom - Responsibility, Ⅲ. Variety - Uncertainty, Ⅳ. Being at sea - Interdependence.

These are the facets of the subject's orientations that were expressed during the interviews. Together they compose the sets of wants, expectation and priorities that the respondents expressed having towards the conditions, rewards and experiences that were achievable in, and from, the fisheries. These set of wants, expectations, satisfactions and priorities are what commits and motivates them to fishing as it was socially organized.

Ⅰ. Success - Progress.

Success and progress tend not to receive much attention in the orientation to work literature; there they are usually only addressed as promotion and improved personal consumption. This is curious given the orientations approach is a social action one where such action is thought fired by aspirations and evaluations of methods and achievements. The notions of success and progress here concern the subjects', who are fishers, evaluations of their success and progress in income and consumption and they also concern their evaluations of their methods and achievements. The activity of fishing is a type of social praxis which can be more or less successfully prosecuted where progress is identifiable. A

number of studies have elicited these aspects of the fisheries: Byron, (1980 pp.228-31) and Cohen (1987) in studies of Shetland fishers, reported that the crews and skippers there courted the prestige of being successful and skilled in their fishing and strove to improve their skills, although Cohen lacked confidence regarding the criteria used for these. Poggie jr., (1979) reported that his subjects had conceptions of, and reasons for, crews being good, skilled, fishers. Also, the debate around the notion of the skipper effect concerns fishers' evaluations of themselves and others as successful fishers.(Durrenberger and Palsson 1986, 1990, Gatewood 1984, White 1992) All attest that the notions of success and progress have wide currency with fishers throughout the world.

Both personal and boat success and progress are intended here. Success was spoken of positively by the fisher subjects throughout their interviews in a number of sense. The most obvious was in carrying out and completing the fishing activity proficiently; of the fish having been shrewdly hunted, caught and brought aboard in large, visually exciting, hauls. Another, was that of achieving a good price for the fish which, due to the share system, readily translated into good personal income for all the crew. The more skillfully and expeditiously, with some personal effort, that the fish were located and caught their reports indicate that their evaluation of their success was greater because the trip was shorter and more exciting, the landed fish's quality higher, their return home quickened and the potential achievement of a good balance between time at sea and time ashore eased. Furthermore, a short trip made their success more obvious to other fishers, to fish sellers and to local bankers, which, especially if often repeated, forby the desired prestige it brought, could also ease obtaining credit to either improve the craft or to weather or overcome business difficulties. Success, then, was appreciably expressed by the fisher subjects in terms <u>both</u> of the proficient execution of their fishing and of getting a large catch of quality fish which fetched a good price affording all a good income.

Continuing success translates into progress. Being able to observe personal and vessel progress were reported as desired of the fisheries. An appreciation of personal progress was expressed by the fisher respondents as improvements in living standards, the development of skills and the achievement of career goals, i.e., the acquisition of certification, obtaining shares in a boat and/or of a skipper's post. Appreciation of progress in the vessel was expressed as of the continued improvement in their performance, in the vessel's equipment and in its timely replacement. Skippers and deckhands, off all classes of boat, spoke of having a strong interest in the practices and innovations of other fishing boats, which they closely monitored and listened in to on their radios. This inter-vessel rivalry was integral to interest in fishing.

Ⅱ. Freedom - Responsibility.

Freedom is conceptualized and analyzed in the orientations and other studies of work that can be summarized as the freedom from direct supervision, the opportunity to exercise control over task performance and that to exercise personal abilities. There is much evidence that the greater availability of these generally improves the appreciation of a job; i.e., both the freedom from direct supervision and the ability to exercise control over work tasks were found to be sources of general good feelings about a job by Goldthorpe et al.,(1968 pp.20-21,27-28,34-36) Prandy et al., found that the intrinsic job rewards of control and the use of abilities were high in their subjects wants and had diffusive effects in the that higher perceptions of, and satisfaction with, these increased the subjects' satisfaction with their work.(1982 pp.75-7,135) A common report in fishing studies is satisfaction with the freedom fishing afforded and the opportunity to be your own boss. Poggie and Pollnac,(1978) and Apostle et al.,(1985) in their satisfaction study of fishers, found an independence factor to be important for fishers in the correlations of the fisher's satisfaction responses and Binkley,(1990) found a control satisfaction factor. While

there was no comparative indication of the nature of this satisfaction, different levels of this satisfaction were recorded that accorded with different forms of ownership and organization of the fisheries. Likewise, the freedom afforded by the fisheries, in the sense of freedom from supervision, freedom over control of work tasks and to exercise their abilities, was reported by the fishers interviewed here to be a valued aspect of the fisheries. For such freedom to be possible requires that all fishers on a boat work with self-motivation; freedom entails responsibility.

However, with the exception of the fisheries studies where it is touched upon obliquely, through the comparative analysis of the responses from those working in different social organizations, in the work studies the freedom to exercise control tends to be looked for only of the immediate work tasks. Probably this is so for large, highly centralized, organizations where these studies were mostly conducted and where freedom and responsibility tends to be more sharply hierarchically demarcated. On a fishing boat their demarcation is not so clear and such control is not confined to control over the immediate work tasks but also includes the ability to exert some control, influence, over the operational, investment and repair decisions of the boat. Furthermore, while there is some differentiation in the realm of this control between skippers and deckhands, the deckhands here reported appreciation and preference of the informal and flexible authority structure of a fishing boat. They considered the decision making processes to be more consultative and less hierarchical on a fishing boat than they experienced or believed to exist elsewhere. Binkley (1990) agreed that fisher owned boats, utilizing the share system, were less formal and more consultative than shore company owned vessels and that fishers on the former recorded higher levels of satisfaction than those on the latter. Byron (1980) and Cohen (1987) also found that fisher owned boats were characterized by informal authority relations. While the authority and responsibility for the boat ultimately rests on the skipper in law

and practice, all the fishers here reported that they appreciated and preferred a less formal and more open structure of authority which allowed all some control over the context of their work.

Ⅲ. Variety - Uncertainty.

Variety and uncertainty were reported as valued aspects of the fisheries by the respondents. These facets were reported as the contrary to the regular routine that they perceived characterized other types of work either experienced or considered to be available to them, such as craft or factory work. These features are the opposite of the regular and routine hours worked, of the continuous routinized and monotonized nature and temporal rhythm of that work and dissimilar to the regular unvarying wages paid for that work. It is with factors which the orientations and other studies of work usually found to be sources of disaffection and discomfort that the subjects reported the fisheries to contrast in a positive and desirable way. Chinoy's study (1955) of the auto industry found workers there more dissatisfied with the more routine and monotonous line work than other work. Blauner's (1964) comparative study of industries and technologies found more dissatisfaction among those with the more routinized work than any of the others. Goldthorpe et al., (1968) also found important differences in satisfaction corresponding with different jobs with different levels of monotony and routinization. What was reported by the fishers that they appreciated about the fisheries was the opposite of what was found to be disaffecting elsewhere.

The variety and uncertainty that was appreciated and preferred of the fisheries was reported in the irregular hours and rhythms of work; in sailing with the tide and weather and returning whenever a full catch was aboard, in the quest for and locating of the fish, and in the quantity in which they are found and hauled aboard. In this the temporal nature of the work patterns are akin to those analyzed by Thompson in his article (1967) and picked up and developed recently by Whipp.(1987) The emphasis here is on the

non-unilinear and non-uniform experience of time. Work in this form is seen as more enjoyable and attractive than work which is continuous and unvaried in pace. Whipp found strategies within the modern factory, as did Roy,(1955) which were developed by workers to break with a continuous and unvaried pace of work. The fisher's reports indicate that they find this a feature of the fisheries, as it is socially organized, an attractive and preferential one.

The variety and uncertainty of fishing appear in, sometimes long, periods of inactivity interrupted by a flurry of activity to deal with a large catch and shoal of fish in a series of hauls. The fishers here reported this as an occasion of excitement for all the fishers, as an adventure. The variety and uncertainty were also reported to be consequences of the weather which require thoughtful coordination and response from the crew. At extremes the weather can be hazardous and dangerous and can lead to an emergency situation which was later reported as experienced as a form of adventure. Simmel (1971) in an essay on the adventurer pointed out that the adventure interrupts the flow of events and as such it reflects on, and directs attention towards, that flow ascribing it new meaning. The adventure does this by interrupting, and hastening the pace of, events so that time is experienced as passing quickly and, where work is concerned, work is not sensed as a turgid undesirable necessity. Thus, variety and uncertainty add a new dimension to how these fishers experience fishing.

The fishers reported preferring the variety and uncertainty of their incomes to the regular certainty of a wage also. On the way back, especially after a good catch, they reported that there was speculative excitement over the price the fish would fetch and downheartedness when this was not realized or expected. However, as well as this immediate expression of the occurrence of variety and uncertainty there was also the longer term ones associated with the cyclic trends of the fisheries. These cyclic tendencies were sources of uncertainty and while the fishers did not like the downward cycles they did inject a long term element into their

orientation. This awareness gave them greater resilience and drive when confronted with difficulties either in the fishery or the boat. The expectation that either their fishing or the fisheries would improve in the future gave them reason to strive to surmount problems. Such an element helps explain the resilience and dynamism of the fishers and, thereby, of small scale fishing.

IV. Being at sea - Interdependence.

The orientations and job satisfaction literature usually addresses work in the abstract; as abstract social action pursued within a set of evaluative conditions that are continuous across, rather than contrasting amongst, occupations. In some respects this posture is understandable because people do comparatively evaluate and make decisions amongst occupational opportunities which require some constancy for evaluative purposes. In other respects the posture is curious. The origins of the orientations approach were in Marxism, which conceived productive activity as social praxis with a beginning, a middle and an end: Productive activity was heterogeneous in its means and ends and provided a varied breadth of social experience. Consequently, in Marxist theory, work was both a unique activity, a use value itself, and homogeneous in producing value.

There is a rightful tendency in Marxism for work to become a form of social praxis rather than the basis for social praxis. The orientations approach attempted to rectify this by focusing their attention on work as paid labour in order to refute the Marxist claim that class location determined consciousness. Finding it easy to show that workers had no clear 'class consciousness' the difficulty arose in explaining the consciousness they had. Other activity outside of work was posited as providing a meaning for work and a labour supply motivated by extrinsic rewards. When the activity itself was addressed it tended to be addressed in terms of abstract qualities such as pay, hours, security, convenience, working conditions, use of abilities/initiative, pace of work,

fringe benefits, relations with supervisors or peers, etc. While these notions are not useless, some are utilized here, exclusive concentration on them loses something of the distinguishing character of occupations. It loses aspects of what makes one occupation identifiably different from another. What makes banking different from operating a lathe, from word processing, from mending a/the car, from fishing is not only variations in pay or whether there is control, use of abilities, good hours, good supervisory relations, etc., the difference also comes from the activity's identity, what may be called its occupational identity. Decision making, with respect to taking, remaining at, or leaving an occupation, is influenced by occupational identity.

The element of being at sea is a unique aspect of the occupation of fisher which distinguishes it from shore jobs. The respondents reported being at sea and in the open to be one of the features which made the fisheries attractive and preferable to other occupations for them. Being at sea cannot be considered the end of the social praxis of fishing but as part of the process of the activity. It is an aspect of the activity itself being enjoyed in its practice and not simply for what is obtained from it. In the fisheries satisfaction studies being out in the open was generally found to be a source of satisfaction.(Pollnac and Poggie jr., 1988 pp.890-1, Apostle et al.,1985, Gatewood and McKay 1988 p.119, Binkley 1990 p.400) While all the fishers in these studies reported satisfaction with being out in the open, differences in the levels reported were found to accord with differences in the social organization and/or types of fishing.

Being at sea in a small boat, all boats are small at sea, only more or less so, imposes an interdependence amongst the crew and impels them towards sociability. The fishers interviewed reported that good social relations among the crews was one reason for being attracted to and preferring the fisheries. Gouldner's (1954) study of workers in a gypsum plant found the miners, who worked in a confined and dangerous environment, were more interdependent and

sociable than their surface colleagues in the same plant and community situation. Likewise, the fishers work in a cramped and dangerous environment and depend on one another for their safety and well being. In the Scottish Fisheries this interdependence and sociability was also socially located within a different social organization and payment system which strengthened it. Such sociability amongst fishers was noted in a number of studies of fishers as characterizing the crews of fisher owned boats (Binkley 1990, Byron 1980, Cohen 1987, Norr and Norr 1978, Thompson et al., 1983) some of which found that crews on fisher owned boats were more sociable than those on shore company owned boats.

Explaining the Social Organization of the Harvesting Sector

From this review, the reports of fishers and others interviewed for this study, the evidence of studies of fisheries in Scotland and elsewhere the following is hypothesized: The solution to the problem of the small scale social organization of production in the fisheries lies in the specific nature of the activity, in the comprehensive social praxis required to complete the production cycle and in the nature of the experiences of these, especially as those experiences contrast with other and alternative forms of that activity and social organization and the experiences of these. The solution also lies in the wider social framework in which the social organization is located.

The solution of the problem of the social organization dominant in the Scottish Fisheries lies in the distinctiveness of both the activity and experiences of fishing, especially as the social organization itself affects these. It lies in the way that the activity and experiences contrasts with alternative kinds of productive activity, especially as that is dissimilarly organized. It is in the way that dissimilar organization affects the activity and the experience of it and offers a contrasting and possible alternative form of social organization to that predominant in the Scottish Fisheries. In this latter sense the explanation begins to

refer to the wider social context of fishing and its social organization. There is, however, another sense in which that wider social framework within the social organization is located is important for its explanation.

A fishing boat is a socially located unit whose organizational strength partly derives from the social network of organizations within which it is integrated and the social development of scientific knowledge which enhances its capacity to fish efficiently and safely. While the appearance of a fishing boat is of a lonely vessel fighting the sea and the fishers often perceive themselves as highly individualistic they are, in fact, socially located and dependent on the extensive social networks that they are rooted in. The survival and prosperity of their social organization partly depends on the nature of the network of social relationships that they are grounded in. One part of these extensive networks is in their linkage with shore organizations such as fish sales agencies, banks, etc. Part is in the social development of knowledge. This is knowledge of fish stocks, of their reproduction and migratory patterns and of the means to ensure an efficient, safe and balanced harvesting of species. It is also the social development of knowledge of fishing and navigational technologies, many of which the fishers are neither sole users or financiers. The social location of the social organization predominant in the Scottish Fisheries extends and delineates some areas of their freedom as a social unit and helps explain it.

In this integration, the social organization of the Scottish Fisheries has more in common with developments which have been crudely identified, and attempted to be explained, through the various models or concepts of post-Fordism, post-industrialism, post-modernism, information society, or the misnomer of disorganized capitalism, etc. That as well as the internal social relationships amongst the crew the vessel is situated in a wider social network part of which was hinted at by Marx in the

Grundrisse where he spoke of knowledge becoming a force of production and source of value. This is where the explanation begins to suggest the necessity for a reconstruction of that social theory. (c.f.,Holmwood and Stewart 1983,1992a,1992b.)

The social organization of the Scottish Fishery is flexible, responsive and dynamic because of the near unity between capital and labour and the share system of income distribution as they contrast with other organizations and systems. Fishing is an activity practiced in the open, changing and sometimes dangerous sea. This along with the little known reproduction and migratory pattern, their varying species cohabitation, the varying intensity of demands when working aboard a fishing boat composes an inconstant undertaking. Because of this the fishers need to be able to rely on one another fulfilling the responsibilities of their post through self-motivation and the fullest possible exercise of their abilities. Fishing, as an occupation, offers fishers a bundle of features, some of which are common to most occupations and some are unique to fishing. This study's fisher subjects' orientation to fishing is a multifaceted one whereby they seek and consider that fishing affords them more of the features sought of a work situation than any other open to them. Some of these features were the ones found to enhance the appreciation of a work situation and commitment to the social organization offering these in studies of employment. The social organization of the Scottish Fisheries is argued to offer a more comprehensive bundle of these features which are also enhanced in the manner of their availability by its social organization.

While the availability of some of these features is due to the social praxis of fishing, as they were found obtainable in fisheries with very different, more centralized 'capitalistic' or 'rationalized', social organizations, their availability was found, by fisheries' studies, to be greater and more extensive where the fisheries were organized closer to the form prevailing in the Scottish Fisheries. The studies also often found that the

fishers reported appreciation of them was greater in that form of social organization. This study's fisher subjects' reported evaluations of fishing, of its social organization and of their understanding and experience of other occupations and dissimilar systems of organization agrees with this, strengthening their commitment and motivation to it and fishing. Their orientation and comparative assessments of fishing gives them good reason to work to sustain, not to restructure, the social organization of fishing. The outcome of the vane attempt to restructure fishing along centralized 'capitalistic' or 'rationalized' forms and the fishers' perceptions and understandings dissuades both them and others linked with fishing, who would normally be considered sources of reorganization, by either vertical or horizontal concentration, from doing so. The comparative assessments of fishing includes assessment of the technical nature and requirements of fishing.

The social organization of the Scottish Fisheries is partly explained by the nature of fishing activity which requires fishers who are motivated, coordinated and flexibly responsive in temporally and physically applying themselves to fishing. The location of the fish in the expansive, changeable and dangerous sea, their not too well known reproduction and migratory patterns along with the varying intensity of demands from working aboard a fishing vessel composes an inconstant undertaking. This undertaking is best executed by an independent, adventurous, skilled, coordinated, and flexibly responsive crew. A crew who independently seek out fish and who are adventurous in doing this in new fishing grounds and who are adept at fishing and working together can considerably improve their catches. A crew who can independently develop their techniques and technologies for and in searching out fish can improve their catch above the prevailing average. A crew that can do these things and who are <u>able</u> and <u>willing</u> to work at flexible times and for flexible lengths of time with a varying intensity that accords with the

locating and catching of the fish with mutual self-motivation can do much better than those who are less able or willing to be so responsive. A crew who are in command of their own fishing trips and who are not working to a bureaucratically homogenized and centrally planned and timed work and payment schedule can work more freely and responsively. They can fish more freely and responsively than those who fish under a bureaucratically ordered regime and routine and to better effect.

While the nature of the fishing activity is more befitting such a crew this is not automatically forthcoming; studies of the shore company owned trawl fleet found them to be more marked by conflictual relationships amongst the crew and between them and the owners of the fleets. Comparative studies of fishers on shore company owned and organized fishing fleets found their fishers to be comparatively less satisfied than those working on fisher owned boats. Where these fleets were owned by fish processing companies, they found that these companies experienced formidable difficulties in controlling and coordinating both the location of their boats' fishing activities and the species constitution of their catch to consistently mesh with the species requirements of their processing capacities.

The crew who can be independent, adventurous, self-motivated, coordinated and flexibly responsive in temporally and physically applying themselves to fishing are better placed to seek out, follow and catch an unbounded and rapidly moving prey which are found in inconstant species mixes in the expansive and dangerous environment of the sea than those who cannot be so. The nearer unity between capital and labour, the more informal and open command structure, the method of income distribution, and the occupational identity of share fisher elicits this from fishers better than a more centralized and rationalized ownership structure. Furthermore, they elicit this while making fishing a comparatively more comprehensively endowed and interesting occupation. Thus, while fishers working on a shore company owned

vessel who are paid a wage face the same technical demands of fishing they would be less free to strike out on their own and fish adventurously to their own initiative. The apparently fickle movement of fish stocks does not facilitate the construction of a routinized fishing pattern to specific fishing grounds for specific stocks that is either seasonally or otherwise routinely adjusted. Fundamentally, centralized, shore company ownership and control of capital assets, fishing boats, is concerned with the routinization and regulation of practices. Logically, such ownership and control is not about giving over that control of capital to others and allowing them to roam freely and take risks in search of any species of fish that they so encounter or desire.

Furthermore, while fishers working on shore company owned vessels, who are paid a wage, face the same technical demands of fishing they would be less able to strike out on their own and fish a temporally flexible pattern without invoking rigidities in the rationalized and routinized system. For example, where there are supplements to the basic wage offered which attempt to elicit extended, flexible, working hours from the crew, the crew would be likely to invoke tactics to extend the work pattern into the more lucrative work time where this was unnecessary. In contrast, the share system of distributing the income from the trip equally amongst the crew and the owners, especially where the owners are also fishers on the boat, would not invoke these tactics as the income would be more determined by the quantity and quality of the fish caught and processed than the timing of the work. Fishers working to that system could identify some equity in the income distribution which equated with the shared risks taken. In turn they would be more willing to participate in adventurous, perhaps risk taking, fishing where the risks and returns were thought to be similarly participated in and shared by owners and fishers. The social organization of the Scottish Fisheries where the boats are owned, usually in share, and controlled by the fishers and the income from each trip is distributed by the share system, makes it

easier for the fishers, as a crew, to fish independently and adventurously. It makes it easier for them, as a crew, to take measured risks fishing new and tricky grounds and/or in tricky weather conditions, gaining some valuable differential advantages.

This combination of requirement and experience is reflected in the fishers attributing their success largely to their own adeptness. Those interviewed here explained limiting their share ambitions to one or two vessels because of the need for them to have independent and informed control over the fishing efforts of the vessels that they owned or had a share in. Attributing their success to their independence and adept and informed fishing meant they placed large stress on the competence of the fishers involved in the sense that all good fishers must have these qualities. Having these qualities meant that they thought good fishers must be independent and in informed control of the boat otherwise they would not be good fishers. Like them such fishers would resent and not tolerate others interfering in and trying to influence their fishing and they would not fish with the same productive results.

The solution to the problem of the social organization predominant in the Scottish Fisheries lies also in the quality of the social relations within which its embedded. The fishers sell their fish in the local market by auction where there is a minimum intervention price, set by the EEC and administered by the fish producer organization that they are members of. The fish are sold through fish selling agents who take a commission for this and other services that they provide. Other fishers and a fisher's relatives and friends sometimes take minority shares in their boat, lend money to them to become established as share owning fishers and/or recommend them to others for this purpose. They also do this to assist them improve their craft. The fish selling agents also take minority shares in the boat and lend fishers money to assist them buy or improve their boats. Local banks, fuel suppliers to the boats, business consortiums, etc., are willing to finance new or successful fishers to buy or improve their boats.

None have shown any enthusiasm to form a large fishing fleet under their ownership and control, preferring, instead, to restrict their activities to those of their primary purpose and concern of fish selling, servicing and provisioning the fishing boats, etc. In this they have a similar view of the nature and practical requirements of fishing and of the fishers' orientations to fishing, intransigent independence and assessments of what makes a good fisher. Their own limited capacities to exercise informed control over the operations of the boats at sea without impairing these boats' effectiveness confirms this as does the failure of the earlier attempt to restructure the social organization of the fisheries. Thus, organizations and people closely associated with fishing face obstacles to, and have similar reasons not to attempt to centralize ownership and control of a fleet of fishing boats.

The explanation of the social organization dominant in the Scottish Fisheries lies in the distinctiveness of the activity required to locate and catch fish in the expanse of the sea and the experiences of fishing, especially as the social organization itself affects these. The social organization is partly explained by the nature of fishing activity which best suits fishers who are motivated, coordinated and flexibly responsive in temporally and physically applying themselves to fishing. However, this is not automatically forthcoming; the method of income distribution, the more informal, open, command structure and the occupational identity of fishing elicits this from the fishers better than a more centralized and rationalized ownership structure. Further, they elicit this while making fishing a comparatively more comprehensively endowed and interesting occupation. The social organization of the fisheries is partly explained by the fishers' orientation to it. It is partly explained by the contrasting paths of development of the different forms of social organization of the fisheries that once existed in Scotland. It is also partly explained by the perceptions and understandings of those who are linked with the Scottish Fisheries and who would normally be most

immediately expected to foster restructuring of fishing, perhaps as vertical concentration of businesses. The perceptions of these others are coloured by the earlier failure of this attempted restructuring,by the nature of the fishing activity and by the orientations of the fishers. The emphasis of the analysis and argument of this thesis is on these elements and showing how they appeared in the replies of the fishers interviewed for this study.

Conclusion.

This chapter reviewed the orientations to work literature to provide a way to focus on the fishers crucial for sustaining the social organization of the fishing boats. It did this by providing a way to examine their perceived opportunities, organizational options and career ambitions. It also facilitated a grounding of their reports within a wider theoretical and evidential framework.

The review elicited developments within that literature which showed that orientations to work were more commonly multi-, rather than single, faceted and also indicated sources of relative joy and frustration in the way work was experienced. This review also elicited aspects of orientations which may be considered to be closer to wants than expectations and contended that reports of the greater, sometimes more extensive, availability of these in the Scottish Fisheries, as it was socially organized, helped explain the comparative success of the small scale sector in contrast to the failure of the company owned trawl fleets. Insofar as the trawl fleet's social organization resembled that of the subjects of the orientations studies and that of the small scale sector contradicted it, which studies of these fleets and sectors tend to confirm as so, then the subjects in the small scale sector can be expected to express a preference for that sector. Indeed, the subjects of this study expressed preferences for that sector in contrast to the other types of occupations as they were differently socially organized and which either they had worked at or which could be considered available to them. These preferences

were part expression of their orientation and they gave them good reason to work to protect the social organization of the fisheries which they perceived as affording them important comparative benefits. It provided them good reasons not initiate concentration of production through horizontal concentration and for to become and remain fishers rather than working at most alternatives.

Indeed it was argued that this contrast in the social organization of the fisheries which enhanced the availability of aspects usually found desired if not available of an occupation in the orientations and other studies also befitted the technical and practical requirements of fishing. The social organization, with its share system of income distribution and more informal, consultative, command style elicited from fishers innovative, flexibly responsive, self-motivated and mutually supportive calculated risk taking fishing. In this the fishing boats were embedded in an extensive social network of organizations which had no motivation to restructure the fisheries, although some were the most obvious immediate sources of such restructuring. Such motivation was dissuaded by their perceptions of the earlier failure of the company owned fishing fleets, of the technical and practical requirements of fishing and of the orientation and dynamic successes of the fisher owned fleet. As will be argued later, the continuing general wellbeing of the fisheries is dependent on the success of some of these wider social networks in expanding knowledge of the reproduction of fish stocks and coordinating practices amongst the fishers which will allow the appearance of safe, efficient and sustainable harvesting of fish species. All three of these are of equal importance; no one can be prioritized at the expense of any other.

Footnotes.

(1) Occupational identity, particularly where it is strong,means that occupations cannot be assessed only in terms of homogeneous categories given the need to distinguish between occupations. It is surprising that in most work studies subjects are generally required to comparatively assess occupations in terms of common and continuous features.The fisher subjects also reported features which distinguished their occupations from others.

Chapter 7. The Respondents' Assessments of Fishing.

Introduction.

Review of the orientations literature revealed that people pursue multi, not single, faceted orientations of their work activity which motivated and committed them to any organization offering satisfaction of most of these orientations. Also revealed was that the concept of rewards was insufficient to enable full characterization of an orientation. Furthermore, it was found that reported likes and dislikes, preferences, etc., of necessity must be taken as revealing an orientation and details of the rewards and aspects of an occupation. In this chapter the fishers' reports of their likes and dislikes of fishing and its social organization will be analyzed to describe the facets of their orientation to, and perceived details of, fishing as it was organized.

As indicated, in Chapter 6, in the orientations literature the concept of importance was seen as an aspect of orientations that needed to be addressed. Problems were encountered in this that writers had attempted to resolve by asking subjects to prioritize these rewards in terms of those aspects of their work in which they would most welcome change. This was argued to be inadequate and for this study fishers were asked to indicate what, if anything, they disliked of fishing, which, with their likes and preferences, would identify actual or potential motivators.

The Fisher's Likes of the Fisheries.

The fisher subjects' replies to what, if anything, they liked of fishing, is recorded in Tables 1 and 2. Both reveal remarkable similarity in the deckhands' and share-owning skippers' reports.

Table 1. The Number of Fishers Advancing Each Reason for Liking the Fisheries. (Sample: 24 Skippers & 16 Deckhands)

Reason for Liking the Fisheries.	Number in Each Occupational Category Advancing Each Reason.	
	Skippers	Deckhands
Success & Progress	19	15
Freedom & Responsblty	18	11
Variety & Uncertainty	16	11
Being at Sea & Intrltnshps	18	12
	N=71	N=49

Table 2. The Number of Fishers Advancing 1,2,3 or 4 Reason for Liking the Fisheries. (Sample: 24 Skippers & 16 Deckhands)

The Number of Reasons Advanced.	Number in Each Occupational Category Advancing These Multiple Reasons.	
	Skippers	Deckhands
1 Reason.	-	1
2 Reasons.	5	2
3 Reasons.	15	10
4 Reasons.	4	3
	N=24	N=16

In the multiple responses there is a remarkable similarity in the manner that the share owning skippers and the deckhands expressed their understanding, both here and throughout, the interview. One deckhand from a mid-range craft replied:

> "The money. I like the money.... It's not like working in a factory where you are under pressure, stuck inside.... I worked as a salesman, pressure all the time. You don't get that at fishing. There inside the shop you have a manager on you, he has a manager chasing him and he chases the undermanager and you. The skipper is easy going...."

Here, clearly stated, is a like of the income obtained and of the freedom from direct supervisory control which reduces the pressure and leaves him free to control work performance. Another two deckhands, from the same craft class have similar responses. The first replied:

"The money is good. I like being away, being out there. I am that used to being out there that I don't like anything else. I like it out in the open. There it's changing all the time. It's changing all the time in the fishing; your watching all the time for fish and the weather and listening in to other boats. You have to be careful where you put your feet and your hands all the time.... Fishing is always changing."

He liked the combination of the income from fishing, being at sea, the variety and uncertainty of the experience, the demanding need to exercise skills and abilities, in an unstable environment, in coordination with other crew members. The second deckhand replied:

"Getting home at the weekend. It's not like a shore job with the gaffer over you, always telling you what to do. You never hear an order dished out on a fishing boat; you know what needs to be done and get on with it, not like in a factory. You are not working from 7-5 in a routine. It is a freer atmosphere than like in a factory.... The money is pretty good also...."

This fisher reports the appreciation that on a boat the atmosphere is freer and that the crew are self-motivated, they work together independently and interdependently. Consequently, orders are not given off hand, they are suggested here to be relatively absent and, more probably, passed out consultatively where possible and appropriate. Moreover, this fisher liked the good income fishing afforded. There was little difference between the reports of the deckhands and the skippers. A skipper from a mid-range boat said:

"I am my own boss....
I can't think. Take a look around here, you can make a bob or two at fishing if you put the effort into it... you can make a good living if you put the effort in. I've no qualifications, I wouldn't be able to do this in civvy street. I would never have made this working in a factory.
It's a great feeling being your own boss, I couldn't be subject to the discipline. I couldn't be stuck inside. I couldn't work the hours 9-5. I like to come and go as I please. I couldn't stand the discipline of being told what to do."

Expressed here, are the qualities of fishing responsibility; not being subject to the discipline of direct supervision or the regular routine of a clock 9-5, Monday to Friday, working within a factory means having responsibility for deciding when to set sail and return, for locating and safely catching fish, for determining investment patterns and meeting costs in an ecological and social environment. This skipper likes the variety of not working a stifling routine, the opportunity to exercise his abilities and having these responsibilities, which were within his capacities:

Fishing had afforded a good income, especially for those with no qualifications other than fishing ones, a remark of recognition of limitation of prospects, with progress in personal consumption and in the craft, where reinvestment was determined by the fishers, not a company owner. A skipper, from the same vessel class, liked:

> "It's not really like an employer-employee relationship, it's much freer.
> There is always the possibility of making big money. It is always possible to make a big catch and get a lot of money. There is the freedom; everybody is much of their own boss in the fishing it is a freer life....
> There are leaders and followers in the fishing business. I am a leader. You see boats who follow other boats. I led in introducing new gear and in finding fish. That depends very much on your skill, on your knowledge of where the fish are and of how to find them. In very my early days I had to navigate to them using a sextant, now all our knowledge goes onto a computer disc with computer navigation to sail by."

Here many of the facets of the orientation are expressed: First, there is emphasis on everybody being much of their own boss, which means that as skipper he likes the interdependency of crews in the social activity of fishing. Second, this fisher emphasizes the potential to make a big catch with all that that entails, including sometimes landing a very big pay, while overall earning a good standard of living. Third, interest in accumulating knowledge and skills and applying these to uncover new fishing grounds and techniques. Fourth, developing their boat and fishing gear so that there was constant progress in their capacities and they achieve recognition as progressive. All of these were reasons for liking fishing as an occupational way of life.

In these, and throughout the rest of the reports here, aspects found to be crucial for importance, satisfaction, preferences, etc., in the orientations studies are reported as available in the fisheries and aspects which were found to cause dissatisfaction in these and other studies were reported absent: Aspects such as intrinsic rewards, opportunity to use abilities, freedom from supervision, good income, etc., which were found wanted if not available, were reported here to be available and those such as monotony, lack of variety, powerlessness, etc., which were found to be sources of dissatisfaction are conspicuous in their absence.

A skipper, mid-range craft, emphasized the challenge of the fisheries and progressively developing both fishing techniques and technologies as reasons for liking fishing:

> "The challenge. I love the challenge....This scarcity of fish gives a fresh challenge. I could not say,though, that if I had just built a new one million pound boat that I would feel that way but my boat is economical.
> Personally, I get more of a thrill out of introducing new technology. I've always been pretty innovative in introducing new gear and electronics. Everything I've done has been for the crews safety and improve the performance of the boat. The only vulnerable part left in the boat is the aft side where the pulley is shooting the nets otherwise all of the rest is covered in or protected...."

This skipper likes the challenge of fishing at sea and the social interdependence of the crew as a working team. He likes the responsibility of searching out and catching the fish as rapidly, safely and plentifully as possible and having a full cover deck, for instance, increases safety and permits this in severer weather conditions while allowing the skipper to give priority to following the fish more and worry less about the crew, who are less at risk, when maneuvering. New gear and technology progressively improves safety and efficacy and, while providing interest in themselves, they are also recognized and copied by other fishers as the mark of a good, progressive vessel and crew.

Another, unqualified skipper of a mid-range boat, pointed to liking the life at sea and the freedom of the fisheries:

> "Coming home. Everybody likes coming home. Everybody likes coming home after a good trip when they are tired and done...
> Everyone on deck is more or less their own boss. It's not really a job its a way of life. The majority of fishermen enjoy the life out at sea.
> We can fit in anything that we want to. We can get a relief for a week if someone wants to take a holiday. We come and go a lot; it's not like this in a factory where you would get the sack for taking time off....
> You go into the fishing for the money. There is always the chance to make a lot of money. That may be less so now but, it's still there, it's still possible. Our lads average three hundred pounds a week."

Coming home, tired and exhausted, means that they have a full hold of fish achieved from sustained activity; the more sustained and intense this is, the more exciting it would be from a plenitude of fish landing on the deck that need to be quickly processed before the next haul is brought aboard. The quicker and more proficient

the catching, processing and stacking the better the fish quality, the price and income attained. All of which are observed and recognized by the other fishers and the fish sellers etc., in the market increasing the pleasure of the fishing, spurring them on further. Thus, fishing is not simply a job it is a way of life where the activity is enjoyed and there is flexibility in working arrangements to accommodate domestic and holiday needs. He likes the crew to be able to work in a flexible relationship both on the ship and in their time ashore; the pattern of work and of time at sea and ashore is not determined by a strict set of bureaucratic regulations but by the hunt, location, catching and preservation of good quality fish and informal relationships. A good crew and good crew relationships improve fishing and the pleasure of it. The next fisher echoes this, while bringing out the uncertainty entailed in the fishery which a sociable, flexible and responsive crew can deal with more adeptly:

> "I like it o.k. They make fishing good if you get a good price for the fish and there's a good crew that you're going out to sea with... We often count up the price on the way home. There is a lot to be said for the uncertainty of the fisheries. You don't know you're own pay until you get in. There is a sense of freedom in the fisheries, like, also. Nothing is certain; when you are working, when you have time off, when you eat are all uncertain. You work irregular hours in fishing..."

Fishing, by the nature of the activity, is uncertain and this is a reason for liking it. Such uncertainty requires flexibility in the crew, in the time they work, in the spells and intensity that they work, in their patterns of living and in their relationships. In fishing the considerable freedom afforded is attractive and a flexible, sociable, crew copes with the uncertainty and risk best.

The understandings and likings of the fisheries are very similar across occupational and ownership situations; they are also very similar across those from different size categories of fishing craft: a skipper from an over 100 ft craft replied:

> "It's a freer life. It is something you are brought up to... You now have to search out the fish; it is more of an active form of fishing than in my fathers day of the drift net fishing; you don't just shoot the nets and wait for the herring anymore. You need to hunt them out and the crew shoot the net quickly so that the fish are caught inside and don't escape...."

This skipper likes the freedom,the need to hunt out the fish and for the crew to quickly encircle and capture the fish which means that they must work together in good social coordination otherwise the procedure for shooting the nets is a failure that needs to be gone through with, even if it is obvious that the fish will escape the net early in the shoot. A deckhand from this category replied:

> "There is more money in the fishing. Mind you that was true but other industries, I suppose, now match it.
> Purse seining is by far the best method of fishing and working than white fishing and I work with a good family. A purse seiner can catch far more; sometimes one shoot [of the nets] in one night will fill the holds. It will take us two days to bring them aboard....
> Also we spend less time at sea and we see more of our family in purse seining. In the white fishing you are grinding away continually in cramped and wet and cold conditions. Sometimes with the same clothes on for a week and working long hours without sleep. Now we have bigger boats; they are more comfortable, almost floating hotels with showers, good food, T.V. and videos, etc. This fishing is shorter also, for about six months of the year, although we sometimes do white fishing outside of the pelagic season."

This deckhand liked fishing because of the income he could obtain and the boat's owners and crew were good to work with. Also, there had been considerable progress in the boats and in their fishing methods which meant the catch was now hunted and could be caught in amounts that sometimes take two days to bring aboard. Progress in boats had brought appreciated improvements in living conditions where there was less exposure to the rougher weather and where there were more home comforts, good food and entertainment.

Two skippers the under 40 ft boats liked of fishing:

> "Independence; nobody to bother you. You are your own boss...."

> "The money, what a stupid bloody question.... no not just the money. Being your own boss; you don't have to say yes sir, no sir to anyone. You need the money, that's necessary. And there are no boss-union squabbles to spoil it all, upsetting how people get on together, there are no petty conflicts over tea breaks to ruin things like there was when I worked in the engineering industry. What a load of nonsense that was...."

This fisher likes the money, even although he works at the fishing with the lowest returns, the freedom from direct supervision and the ability to determine when to work. Furthermore, the social relations are more informal and integrated; there is an absence of trade unions, negotiating procedures, contracts and conflicts;

social relationships are better than he experienced in industry.

Analysis of the respondents' replies indicates that these fishers, in both occupational and ownership positions on all categories of craft do pursue simultaneously a number of aspects of fishing. In these replies they are also indicating what they perceive to be the current conditions and circumstances of fishing as it operates and is organized. In this they describe an activity that is temporally and physically varied, requires many diverse skills, where the development of craft and equipment increases their freedoms and capacities and where there are specific criteria operating among the fishers and others in port whereby skippers and crews are considered successful and their investment decisions laudatory. These reports indicate that characterization of fishing as having fallen from a glorious past, when all that fishers had to contend with were the practical requirements for catching fish against hazardous elements with little technology and sole dependence on their skills, to one where fishing is routinized by technological development and/or political bureaucracy and where skills have been lost, is quite false.(see Cohen 1987, Clements 1983b)

What the reports reveal is that fishing has changed and that fishers have been vigorous in pursuing that change. They also show a dynamic source of that change. The fishers use clear evaluative criteria for themselves and others for success and progress in their fishing, in their awareness of the problems and dangers encountered in their fishing and the political and other wider difficulties and in the strategies they developed to overcome these. Whereas, Cohen writes:

> "Thus, Whalsay people might pride themselves on being skilled fishermen... But this does not require agreement on how these virtues might be tested, nor who might be credited with them.... People would thus assent to the platitude that there were Whalsay ways of doing things— but would be hard-pressed to reach any substantial consensus on them." (Cohen 1987 pp.83-4)

Thus, he undercuts the foundations of much of his thesis of community priority. Contrary to Cohen's claim that the Whalsay

fishers have criteria without content to guide their actions and assessments of themselves and others there appears in the reports here clear criteria by which the fishers here assess their own and other fisher's success and progress in fishing. Yes, it is true that the availability of government grants and tax breaks aided technological development of the fishery but it is not true to say that these caused them, as Byron,(1985) for example, contends. The earlier failure of company fleets to do likewise with similar grant opportunities attests to this (see chapter 2). The source of change will be shown to reside in the social organization of the fishery with its informal, consultative open command structure, the fishers intimate awareness of the problems encountered and control of investment decisions and the wider social location of the boats.

The Fisher Respondents' Dislikes of the Fisheries.

By asking the respondents what they disliked, if anything, of fishing, the hope was to obtain a slightly different, rounder, perception of their orientation and some indication of what would either commit and motivate them to remain at, or leave, fishing. In the orientations studies this issue was usually presented as salience, defined as dissatisfaction with elements of work; the subjects were asked either to state which aspect of their work they would most welcome a change (Goldthorpe et al., 1968 p.20) or to hierarchically order a set of rewards that they would most welcome a change in. (Prandy et al.,1982) Neither method is entirely adequate; the first is too narrow and the second offers an overly limited set of rewards for subjects to evaluate and, more importantly, seems to assume what it was to uncover. Rather, by asking subjects open ended questions for their dislikes and evaluating how these illuminate their orientation and motivation and commitment to fishing a clearer conception of importance can be obtained; that is of which bundles of facets motivate and commit (see above, Chapter 6).

Here also there are remarkable similarities between the share-owning skippers' and the deckhands' reports in their meaning and frequency. The reportage of dislikes is shown in Tables 3 and 4:

Table 3. The Number of Fishers Advancing Each Dislike of the Fisheries. (Sample: 24 Skippers & 16 Deckhands)

Features of the Fisheries Disliked.	Number in Each Occupational Category Advancing this Dislike.	
	Skippers	Deckhands
Very Bad Weather.	17	11
Poor Prices.	9	7
Absence from Family.	9	7
Scarce/Poor Quality Fish.	10	7
Lengthening Trips.	6	4
Bureaucratic Controls.	5	-
	N=56	N=36

Table 4. The Number of Fishers Advancing 1,2,3 or 4 Dislikes. of the Fisheries. (Sample: 24 Skippers & 16 Deckhands)

The Number of Reasons Advanced.	Number in Each Occupational Category Advancing These Multiple Reasons.	
	Skippers	Deckhands
1 Reason.	4	3
2 Reasons.	9	6
3 Reasons.	10	7
4 Reasons.	1	-

In general, the features that were reported as disliked were precisely those which disrupted the positive features of the fishery. If a singular, motivational, orientation was ascribed to these fishers, then these reports would need to be forced into an overly constricting interpretation and their richness lost. To interpret their orientation thus would be to oversimplify it to a vapid cost benefit analysis whereby the cost would be the need to

fish and the benefit a single facet of the fishery leading us to disclaim their replies, leaving the question of why so many remained in fishing when that single facet was not up to the mark unanswered. Moreover, such a single-minded interpretation contradicts the findings of other studies of fisheries and of the orientations to work.(See Smith 1981, for instance) Certainly, money, for example, is both an important motivator and facilitator but equally other facets motivate and commit these fishers. From their reports of dislikes a rhythm is discernable in these fishers 'orientation; a rhythm of a desired balance in the weather's variability, in the time that they desired to be at sea, fishing, and that they wanted spend ashore, in the effort required to hunt and catch the fish and the income attained, (i.e, easily caught fish are less satisfying, regardless of the income attained) etc.

I . Very Bad Weather.

While the weather contributed to the variety and uncertainty of fishing very bad weather was disliked because living and work conditions deteriorated significantly, sometimes stopping fishing completely, depending on the size and power of their boat. Where fishing was stopped all aspects of their likes were negated. Two deckhands, from mid-range vessels, replied:

> "Bad weather, very bad weather, I dinny like that; you are either making for port or can't fish in very bad weather. Our boat is too small to fish in bad conditions. That's about all I don't like."

> "I don't like the bad weather when it stops us from fishing. Then we either wait until it clears or have to head back to port if it doesn't look like clearing soon enough.
> I don't like the scarce fish, it's a thrill when you get a big bag of fish and there's not much of that just now."

They do not like very bad weather because it disrupts or puts and end to their fishing activity. In so doing it must, negate the interest, the thrill, excitement and adventure of fishing.

It was common for the fishers to reply to this question of dislikes with either no or no, nothing really, as though they were downplaying its importance. A skipper from a mid-range craft said:

> "No, nothing really. When there are no fish I get really fed up and also when the weather is poor. If the weather is really

bad it stops the fishing and sometimes it's that bad that we need to go back to port."

The accent here is on the disruption of fishing activity. There is no mention of the disruption affecting the incomes, despite this being an obvious outcome and, as should be reported, if the fisher respondent's orientations were dominated by the single motivator of money. It was the disruption to the fishing activity and the quality of the experience that was reported. Nonetheless, while the disruption of income was not mentioned it must be understood as part of that dissatisfaction otherwise the income would not have been reported either as a reason for becoming a fisher or for liking fishing and it could not be considered a facet of the orientation. A skipper from a mid-range boat replied:

"The weather can be terrible. We are open to the elements all the time, except for a small port-side shelter. There is absolutely no comfort in very bad weather; the boat is constantly rolling from side to side,your weight is constantly shifting form one leg to the other, all of your weight all of the time is shifting unless you are in bed and even then your body is moving.
We are also away from home for ten days at a time and away from our families for ten days...."

The effects of severe weather on living and working conditions were reported here as was the importance of the type and the development of the boat for this disruption. At the end of the analysis of likes there was a quote from a deckhand on an over 100 ft boat who had said that an earlier experience of an older, mid-range boat, had been very disagreeable in bad weather because it lacked more recent developments, such as a full shelter deck, which made them susceptible and exposed to the weather. The last quoted skipper, who uses an older boat, confirms this perception. Appreciation of technical development, the appreciation of progress, (This was that skipper's first boat and was progress.) was apparent in many fisher's replies and can be seen in those of a deckhand and a skipper, in that order, on mid-range boats:

"It's a hard job. It's the hardest job in the world, fishing. It's not as hard as it used to be with the cover decks to protect you and the power blocks and the more powerful ships. I don't like it sometimes, though. It depends on the weather. sometimes the weather is very bad and the boat is bouncing

about. Also the trips are becoming longer because of the scarcer fish in the nearer grounds."

"It used to be very hard; I remember having to haul in the nets with no power block, especially in the bad weather. The power blocks, the cover decks and the bigger engines all made a big difference; now it's possible to fish in worse weather and its not so bad as it was out there in those days.

In these quotes there is appreciation, from another angle, of the the progress in the craft and its technology; this reduces the disruption of fishing caused by the weather and maintains the conditions of the work experience. Very bad weather was disliked because it reduced the quality of the fishing experience and could put a complete stop to the activity all together.

Ⅱ. Poor Prices.

Poor prices were reported as a dislike which, because of the share payment system, meant a lower income from a trip for all of the crew. The following skipper from a mid-range boat reported:

"I don't like bad weather, then you can't fish and it can be rough.
I don't like it just now, when the prices are poor and the fish are scarce and the ones we are catching are small and poor quality fish. When we get good quality fish the price is right, and we are good at finding good quality fish. But when we don't the prices are poor and I don't like that.....

He dislikes very bad weather and poor prices linked with scarce and poor quality fish. Expressed here is pride in their ability to locate and catch good quality fish, especially when such fish were scarce for all fishers. Another skipper, with a mid-range boat, also expressed dislike of poor prices in conjunction with that for, but not in consequence of, very bad weather:

"I don't like bad weather; it stops you from fishing and can be no joy.
Key side prices when they are atrocious. The shop prices last year were one pound sixty per pound for haddock and they were fetching thirty pounds plus for a box at the market. Now its about one pound eighty in the shops and they are only making about twelve to fifteen pounds a box. The fish buyers are liars...."

This fisher vents a belief of injustice in the prices attained for fish then. The next deckhand from a 40-100 ft craft, replied:

I don't like it when the prices are poor and the pay is bad. Sometimes the weather is very bad when it's wet and difficult to work, though it's entirely different now from what it used to be with working under cover and having better boats."

Poor prices are disliked because they do not match the effort:

> "A thousand things. I didny like working all week and no getting [good] prices for the fish. I didny like that. You learn to take the ups with the downs, though. It would be silly to say that there was nothing that I didny like about fishing. I wouldny complain about it as much as others do about their jobs ashore, in a factory and so on. You need to work hard but there are good times like when you get a big lift [a big catch of fish] and everybody is pulling together to clear the decks and get them under before the next haul is dropped on the deck...."

This skipper, from a mid range boat, does not like getting poor prices for the fish, especially for those fish that everyone has worked hard to catch and process. Although he likes it when they hit a big shoal and they are working hard to get them rapidly below; there should be a balance between effort and return. But, he thinks he has fewer complaints about fishing than people working in a shore job do and that is important.

Poor prices are disliked which, because of the share system, bring a lower income for either a trip or a period. Overall, the fishers reported that they liked the incomes that the fishery had provided them. But, the trips were not always the same and the fisheries were subject to cyclic tendencies in the prices and numbers of fish caught which meant that sometimes fish prices were low; what was desired was a balance between the joy of the hunt, the effort to harvest the fish and the prices and income attained. While low prices were disliked, the last quote shows how they are put into a longer time perspective which expects them and incomes to pick up again which assists fishers to outride crises.

Ⅲ. Absence from the Family.

Absence from their families for long periods, especially at crucial times in their children's development or for when a domestic problem arose, was disliked by the fishers. A deckhand and a skipper from mid-range vessels expressed this dislike so:

> "....I dislike being away from the family, I don't like that. I especially disliked it at the start. I couldn't handle a two week trip. We are advantaged only being away for four to six day trips and always back for the weekend."

> "Being away from my family. I don't like that, although, we are only away during the week and are back at the weekend which is not so bad.
> The bad weather is another thing. I don't like really bad

weather when you can't get fishing."

And a deckhand from an over 100 ft boat:

> "I don't like being away from my family. The white fishing [where this fisher's career had started] is the worst for that...I am at sea for only six months of the year and I'm always at home at the weekend. Even when we are fishing the West Coast we hire a bus to bring us back at the weekend and return us to the boat for the next trip. Some other boats have chartered a plane to return the crew when they are far away. That's not so very expensive for a crew of 8 or more...."

This last fisher worked on a fishing boat where, because of the religious beliefs of the owners,(see chapter 4) the crew nearly always returned home every weekend.

There is an image of balance in this dislike of long absences from the family; an image of a preferred balance in fulfilling a desire to be at sea fishing and a desire to have time ashore with their family.

Ⅳ. Lengthening Trips.

This dislike of extended absence from the family needs to be considered alongside another dislike, that of lengthening trips. This dislike was more commonly reported during the second phase of fieldwork when the quantity and the quality of the fish being caught was seen to have deteriorated and was thought to be continuing so. The responses to this crisis was to remain longer at sea, discard more fish there and be highly selective of those being kept to be landed and sold. A skipper and a deckhand from mid-range boats expressed the dislike thus:

> "...the trips are getting longer than they used to be, I don't like that... also we are starting to get more trouble with rules and regulations than before..."

> "No, nothing really, I don't like fishing on Sundays. I don't like the trips getting longer because of the poorer quality fish and the quotas. The quotas don't help much they only increase the fishing effort and the number of discards which are all dead by the time they re-enter the sea again,anyway..."

Central to this dislike is that there is an unwelcome change in the rhythm of fishing; a change in the balance of the time spent at sea and that spent ashore. This is what distinguishes it from absence from the family, although it may compound that dislike. In some ways the dislike is because the extended trips are seen as

foolishly necessary because of the apparently increasing scarcity of good quality fish and ineffective fishing regulations.

V .Scarce and Poor Quality Fish.

Scarce and poor quality fish are disliked because they undermine valued aspects of fishing. They undermine the excitement and adventure of getting big lifts of swirling, silvery, fish in repeated hauls and the need to process them quickly and get them below, stacked out of the way, before the next haul hits the deck. They undermine the possibility of the fishers being able to earn the prestige of being a skilled and proficient skipper and crew, although, when a large catch of good quality fish is achieved then the prestige increases by the degree of its novelty. Two skippers from mid-range boat spoke of the loss of adventure and excitement:

> "....I don't like scarce and poor quality fish. I don't like scarce fish. The thrill of fishing, the thrill of the hunt has been reduced by this scarcity and the fish we are catching are small and poor quality. We don't see big bags of fish being caught anymore, not the same as before, anyway..."

> "It's not the same going to see now because the fish is scarce and the competition keen, although, I suppose every generation probably says this when they are looking back... there is not the same excitement as there was..."

The scarcity of good quality fish is seen by the fisher respondents to be reducing the quality of the experience of fishing. It is seen to be making more of a slog of fishing and less of an adventure with less variety and uncertainty; there is only the certainty of catching smaller, poorer quality, fish. Not only is it seen to be making fishing less exciting it is also seen to be making it more mundane with more time at sea catching a constant type of fish. Reduction in fish quality is undermining many facets of the orientation, highlighting conservation needs.

VI . Bureaucratic Controls.

One of the fishers quoted above mentioned that there were increasing amounts of rules and legislation regulating the fisheries. All the fisheries' satisfaction studies found reports of dissatisfaction with the performance of bureaucratic officials. Throughout the course of the interview, either before or after the

question of dislikes, the fishers frequently fired off invective against the public officials regulating the fisheries. Typically they vented dislike of regulations that they saw as inappropriate or contradictory. They vented dislike with interference in their affairs, particularly by people that they believed or said were without practical experience of the fisheries and incompetent. While many fishers see this as reducing their freedom, it should not be interpreted as equivalent to fully efficacious processes of deskilling, as Cohen (1987) is inclined to do. As the reports of the fishers interviewed indicate, in line with the conclusions of other studies of fishing, noted above, these have not been experienced as reducing skill requirements and negating fully the freedom of the fisheries. Also, bureaucratic controls tend to have inbuilt inefficiencies and the fishers have never been concerned simply with sailing boats and catching but have always had to take account of wider social contexts as part of their fishing strategy. Two skippers, with mid-range boats, said:

> "....Brussels bureaucrats and British fishery officers who have never been to sea telling you what can and can't do. It's odd in the fishing, we often get young guys coming down here and telling you what to do and they've never been to sea... they don't even know what type of fish they are holding...."

> "....Bureaucrats telling you what to do when they don't know what they are doing themselves. Last year they were telling us there were plenty of haddock, to fish as much as we wanted. A 60% cut in the haddock quotas [introduced that year, 1989] means the death of many boats. When boats are doing well the government get a great income from the fishing industry in tax returns but they don't spend it on the fishing. We don't want all out fishing, we want fair but substantial quotas....
> The Department of Trade and Industry introduce things that aren't necessary or practical.... Paper and practice are very different.... Harnesses ... were proposed. They reduce safety, they don't increase it. They reduce maneuverability and increase the danger of getting caught in the winches and gear and all..."

Bureaucratic control and the quality and performance of officials were disliked by these fishers, in part, because they impinged on their freedom. They are disliked, in part, because they profoundly disagree with many of the bureaucratic proposals and regulations that are implemented. The reports suggest that they do not detest all forms of controls. In many situations, where they agree with the efficacy and practicality of these controls they request

their strengthening. In this sense their agreement is selective.

Satisfaction.

In order to clarify the responses to these two questions of likes and dislikes what was usually considered as a satisfaction question was used. Sometimes in the orientations studies, usually following the arguments of Blauner,(1966) direct satisfaction questions were thought to less informative than indirect ones. The The direct questions usually required the subjects to rate lists of rewards in terms relative degrees of satisfaction. Instead, questions asking subjects to state whether they would or would not like their children to follow them in their occupational choice was used. A modification of that approach was adopted here. Rather than request fishers to simply tick agreement or disagreement with this or that statement on some scale, it was decided to use open ended questions asking fishers whether they would be happy for their children to follow them into fishing:

Table 7. The Response to the Question of their Happiness for Their Children to Become Fishers: (Sample: 24 Skippers & 16 Deckhands)

The degree of happiness for their children to Become fishers.	Number in Each Occupational Category Advancing These Reasons.	
	Skippers	Deckhands
Very happy	17	12
If that is what the children want	7	4
Opposed to it.	-	-

None of the fishers were opposed to, or unhappy, about their children becoming fishers. The one caution that did appear in their responses was that some reported that they were happy for their children to become fishers if they wanted to; their children should have some volition of their own to become fishers. These results, as an indirect indicator of satisfaction, corroborates that these fishers are substantially satisfied with fishing and what they obtain from it. Also there were no differences in the

proportion of reports between subject that matched with either the category of boat that they were on or their occupational position.

Conclusion.

In this chapter the likes and dislikes of the fishers were examined to illustrate how they reveal the subject's multi-faceted orientation to the fisheries, which motivated and committed them to the organization which offered most of these. In their likes and dislikes what the subjects' thought important, what motivated them in and committed them to the fisheries as it was organized appeared as the four facets. As importance is a constitutive aspect of an orientation, these reports represent a fundamental expression of these fishers' orientation to fishing as it was organized. These reports also begin to express what these fishers perceived themselves to be obtaining from fishing as it was socially organized. Their replies to the question of whether they would have been happy for their children to follow them into fishing were in agreement with such an interpretation. As an indirect indicator of total satisfaction, which can be considered a cause of commitment, these reports point to a high level of commitment and motivation among these fishers to the fisheries as it was currently organized on these fisher owned boats.

On the basis of these the thesis will be expanded upon to hypothesize that this orientation substantially helps to explain the persistence and relative prosperity of the small scale organization of the fisheries and the lack of concentration in the form of multiple boat ownership employing wage labour, rather than share fishers. The subject's orientation to fishing and the relative failure of the company owned sector, informs the investment strategies of the fishers as well as that of other, potential, shore based investors who may survey the fisheries as a potential for investment. It is argued that both the subject's orientation, and the failure of the shore company owned fleets, favours the maintenance of the current social organization.

Introduction.

Before examining the respondent's preference statements it will be beneficial to first consider their occupational history. This is to lay out some evidence of the subjects' commitment to the fisheries. While current position is important in assessing preference so is occupational history: the occupational history of the subjects gives some indication of the occupations compared to the current. Also the subjects' occupational histories and their evaluations of them provides further indication of their orientation. Their occupational histories will be detailed prior to examining their preference statements. This will show that the subjects spent far longer at fishing than any other occupation.

Categories of Alternative Occupational Experience Reported.

The alternative occupational experiences reported can be categorized into either pre- or post-entry experience. This can be further differentiated as follows:

① Pre-entry experience either wanted by subsequent fishers or being forcefully pushed them by their near relatives. This was intended to provide them with a broader set of qualifications and occupational history as some protection against the cyclic tendencies in the fisheries. This is postponement of entry into the fisheries which is either desired or undesired by the subsequent fisher.
② Pre-entry occupations taken up until a berth on a fishing boat could be obtained; an undesired postponement of entry.
③ Pre-entry experience initially chosen but later given up for fishing; this was initially a preferred alternative and not a postponement.
④ Post-entry alternatives chosen in preference to fishing but later abandoned to return to the fisheries. Either a desired or reluctant move from or back to the fisheries.
⑤ Post-entry alternatives taken because of ill-health and/or old age and not really desired alternatives.(Binkley 1986 provides some interesting information on this type.)

Five categories of alternative experience were reported by

the fishers in the sample. Each one of these has quite different implications for the understandings and meaning of fishing and the alternative occupations and life styles. Some represent either preferred or forcefully encouraged postponement of entry while others represent preferred or forced post-entry alternative experience. The reportage of these is shown in Table 1:

Table 1: The Reportage of Different Categories of Occupational Experienced Identified by Occupational Position and Boat Category.

Category of Alternative	Skipper			Deckhands		
	40'	40-100	100	40'	40-100	100
Pre-entry	2	6	-	1	7	1
Post-entry	1	4	-	-	6	1
Both	-	4	-	-	4	1
Total	3	6	-	1	10	1

(This shows the number of individuals reporting either pre- or post- entry experience and the number reporting both. The total is of those reporting any alternate experience.)

Of the sample, of 40 fishers, 21 had had other occupations and had experienced other types of social organization of production and methods of remuneration. Of these 9 were currently skippers and 12 were deckhands. Given that there are no age differences within this subset which would counter the following, this suggests that the deckhands may have a greater propensity to have alternative employment either before or after entering the fishing than the skippers possibly reflecting differences in capital investment.

If the skippers' greater capital investment was locking them into the fishery more then it should be that the skippers have a lesser propensity to have had post-entry than the deckhands. This was so with the sample here; while both have had more pre-entry than post-entry, the deckhands had a greater propensity to report pre-entry experience than the skippers; double the proportion of the deckhands reported that than the skippers did. As well as the number of respondents with this experience the number of jobs and the amount of time spent in each is important.

The total number of alternative jobs reported by those respondents was 39, almost 2 each. The skippers reported 20, of which 14 were pre-entry and 6 were post-entry experiences. The same figures for the deckhands were totals of 19 and 11 and 8 respectively. The number of pre-entry posts that the skippers had was more than twice their post-entry ones, whereas the deckhands had closer to equal numbers of both. This conforms with the skippers having stronger ties to the fishery than the deckhands.

An important point about these occupational figures is that they indicate points of change and the fisher subjects can be expressing comparative levels of commitment or attachment in making these moves. Before looking at the meaning of the moves it is necessary to consider the actual outcomes of the moves. Some indication of relative attachment is expressed in the time spent in occupation, at both the alternative and the fisheries.

The skippers spent an average of 9.4 yrs each in other jobs and the deckhands 6.3 yrs. Of this the skippers with pre-entry experience each spent an average of 8.7 yrs in these jobs and those with post-entry experience spent an average of 3.6 yrs in these. The same averages for the deckhands were 5.5 yrs and 3.6 yrs respectively. Both the skippers and the deckhands spent a longer time in the pre- than they did in the post-entry alternative occupations. However, the time that the skippers spent in the pre- was three times that they did in the post-entry alternative and the deckhands only 1.5 times longer in the pre-entry jobs. Curiously, for the above hypothesis both spent the same average time in post-entry alternative jobs.

Above it was pointed out that the pre-entry experience could be differentiated into those that the respondents reported were their first preference and those that they reported were taken, sometimes through the forceful encouragement of a near relative, as a precautionary postponement of entry into the fisheries. Those who gave the first reason worked for far longer at the alternatives than those who expressed the second reason. Of the

four who reported the other occupations as their first preference, two were skippers and two were deckhands. Each spent an average of 26 yrs and 15 yrs in these other jobs. It seems, then, that the pre-entry experience crystalizes around these who reported it as their first preference as they contributed three-quarters of the skippers' and just under two- thirds of the deckhands' total of this experience. Having some preference for an occupation appear to have had some effect on the employment outcomes.

What do these findings mean for those who reported having taken the alternative as a postponement of entry? Six skippers and seven deckhands fall into this category and they averaged 2.9 yrs and 2.86 yrs respectively in alternative pre-entry jobs. The top and bottom figures for these was 2 months and 6 years for both positions. Only 2 of the skippers and 2 of the deckhands completed the apprenticeship training intended as an insurance against hard times in fishing. These averages suggest a very much weaker attachment, let alone commitment, to these other posts.

This section began by examining the categories and number of other jobs than fishing that the subjects reported. It was then pointed out that both the skippers and the deckhands had more pre-entry than post-entry alternative experience. Skipper respondents, though, had half the propensity of deckhand repondents to report post-entry experience. This imbalance was confirmed by the greater number of pre- to post-entry posts that the skippers reported whereas the deckhand respondents reported equal numbers of both. The amount of time the subjects who were skippers spent in pre-entry posts was four times that they spent in post-entry posts the same ratio for those who were deckhands was two. The pre-entry experience needed to be divided into those which the respondents reported as their first preference and those they reported as postponement of entry into their first preference for fishing which suggested that only those in the former group could be considered committed, attached, to these other jobs.

The Time the Respondents had Spent at Fishing.

The respondents who were skipper reported having spent an average of 27 yrs in the fisheries and those who were deckhands 21yrs in the fisheries. There was a six year difference in the averages of the two groups reflecting that the career structure of the fisheries require 5 yrs experience before training for a skippers certificate can be embarked upon. It also reflects the time needed to accumulate to invest in a boat.

It is possible that those with alternate experience could have spent a far shorter time at fishing and, therefore, be considered less committed to the fisheries. Of those who had reported alternative experience the skippers reported spending an average of 25 yrs in the fisheries and the deckhands 23 yrs. Those skippers had averaged a little less in the fisheries and the deckhands a little more, only those who reported it as their first choice spent longer in the other occupations than in the fisheries. This was because they came to the fisheries later in their career and it does not denote a lesser commitment to their 'newer' jobs once they arrived there. Looking at those who had post-entry alternative experience, the uninterrupted time that they spent, on average, at fishing was 9 yrs for the skippers and 8 yrs for the deckhands with this experience. The average total and uninterrupted time spent at the fisheries was much longer for all who had alternative jobs than the time in any of the alternatives with the exception of those who reported these pre-entry alternatives as their initial preference. The revealed preferences of the subjects indicate that both their present location and work histories reveal a strong preference for fishing over the other occupations experienced and available.

The Types of Alternative Occupations the Respondents Reported.

The actual types of alternative jobs that the respondents reported are also important for assessment of commitment to the fisheries: the nature of the alternatives indicates something of

the nature of their commitment to fishing.

The single largest group of these other types of occupations was craft occupations that required apprenticeship and college training for their pursuit. These were mostly in small or large factories owned by private companies for a wage; these accounted for 20 of the 39 positions reported. Of these 20, 12 were in some form of mechanical engineering and all but three were pre-entry. If monotonous deskilling or self exploitation was operating in the fisheries (e.g., Clements 1981 Cohen 1987) then theorists would face extreme difficulty to explain people foregoing jobs often identified, by theorists of the schools within which both propositions are embedded, as typifying good wholesome and rewarding work.(e.g., Braverman 1974, Blauner 1964)

The next single alternate occupation reported was the merchant navy, reported by five respondents. Despite the obvious affinities with fishing it was reported as post-entry experience no one and by few remained at the occupation for longer than 2 years, all less than 5 years. Again it is difficult to conceive of the merchant navy as offering the routine work being proposed by the two theses noted in the last paragraph.

The influx of the oil industry into the Peterhead area in the 1970s attracted some fishers but none in the sample for very long and one of those whose first choice was other than fishing left the oil industry to become a fisher later in life. The industry is not the same as occupation and of the six who worked here three were covered above in the craft section as they worked as engineers. Of the remainder two worked on oil supply vessels and 1 as a diver. These latter three had affinity with the fisheries while being different from the fishery.

Next there were two who were self-employed taxi drivers. Two who, through contacts made during their share fishing, worked in the net factory, one over a period of illness. Two worked on the industrial, company, trawlers for a short time, when the 'going was rough', out of Aberdeen and Grimsby. The rest were all

individual reports; one teacher, one farmer, one shop assistant, one storeman, one cook and one oil tanker driver.

These were the alternative occupations reported by the fisher respondents. Few could be considered as poor quality posts which would reduce the value of the assessment of the relative time they spent in either these or the fisheries and, thereby, of their preference expressions also, which will be examined fully later. The nature of these alternatives means that most can only be discounted as valuable alternatives which were given up, to provide support to the theses suggesting either or both the realization of the rationalization process or self-exploitation in the fisheries. Paradoxically, the nature of the alternatives means that this can only be done to the degree the theorists are successful in devaluing a section of the occupational structure that they laud as either the aristocracy of labour or others, in the same theoretical camps, find intractable to the more general processes of rationalization or deskilling. Paradoxically they can only do this by elevating the fisheries.

Conclusion.

In their revealed preference then these respondents, both in their current positions and in their occupational histories, revealed a strong preference for fishing as an occupational way of life. They were currently working as fishers and the majority of those with alternative occupational experience had worked at fishing far longer than these alternatives. In the next chapter the respondents' assessments of these alternatives and their preferences from amongst these alternatives will be examined to show their application of their orientation. The respondents will also be asked to hypothetically assess and express preferences amongst factory,office work or fishing in order to elicit assessments from those without such experience.

Introduction.

In this chapter the subjects' assessments of their experiences of jobs other than fishing, of the general categories of factory and office work and their preferences amongst all types of work will be examined. Asking fishers to evaluate other occupations, with their distinct social organizations and remuneration systems, and to express their job preferences provides another way in which their orientations are expressed. These assessments indicate that not only do these fishers consider that more of these rewards and features are available in fishing than other jobs, these fishers also consider that they are more extensive in their availability. Features found important for satisfaction, commitment and motivation in the orientations and other studies of work are reported here as available in a more extensive and deeper form on fishing boats as they were socially organized deepening and strengthening their commitment and motivation to sustain that organization. These comparisons and preferences are sources of their comparative commitment and motivation and help explain the social organization predominant on Scottish fishing boats.

The Tables of Assessment and Preference Responses.

The fishers' assessments of their alternative occupational experiences, 14% of which were positive due to their providing some, but not sufficient, of the features obtainable from fishing, 86% were negative, are shown in Tables 1 and 2. There were 39 alternate jobs and 104 facets reported; an average of 2.6 each job, the majority were reported with 3 or more facets.

Table 1. The Facets Advanced in Assessments of all the Alternative Jobs Held: 39 Posts.(Multiple Responses.)

Facets Advanced.	Number of Times Advanced Distinguished by their Position on their Vessel.	
	Skippers	Deckhands
Success & Progress.	15 +5 -10	14 +0 -14
Freedom & Rspnsblty.	17 +3 -14	15 +4 -10
Variety & Uncrtnty.	7 +0 -7	13 +1 -12
Being at sea & Interltnshps.	13 +1 -12	10 +1 -9
	N=52	N=52

(The top rows of figures indicates the total reportage of each facet in answering the question: In the bottom rows those marked positive indicate reports that some facets obtainable in fishing were partly obtained in the other jobs and those marked negative were complaints of their complete absence.)

Table 2. The Numbers of Multiple Responses Advanced by Each Fisher in Assessing Each of Their Other Occupational Experiences.

The Number of Facets Advanced.	The Numbers of Multiple Responses per Job Distinguished by the Reportee's Boat Position.	
	Skippers	Deckhands
1	2	3
2	6	6
3	6	7
4	5	4
	N=19	N=20

Table 3 shows all of the subjects' assessments of factory work; all negative. As in the previous tables there are no great differences in the reports of the skippers and the deckhands. The multiple response pattern is shown in table 4 where it can be seen that a majority, from both positions, reported, 3 or more facets. Table 5 shows the reportage of facets in assessing office work where success and progress declined in the reports of the skippers and the deckhands reflecting that they mostly considered office work a step up in status on factory work. The only factor not to decline was being at sea and interrelationships. The reports,

Table 3. The Facets Advanced in Assessments of Factory Work.
(Multiple Responses.)

Facets Advanced.	Number of Times Advanced Distinguished by their Position on their Vessel.	
	Skippers	Deckhands
Success & Progress.	13	11
Freedom & Rspnsblty.	17	12
Variety & Uncrtnty.	18	11
Being at Sea & Intrltnshps.	17	12
	N=65	N=46

Table 4. The Numbers Advancing Each Level of Multiple Response in Expressing Their Assessment of Factory Work.

The Number of Facets Advanced.	The Numbers Advancing Each Multiple Response Distinguished by their Position on their Boat	
	Skippers	Deckhands
1	3	2
2	3	4
3	9	4
4	9	6
	N=24	N=16

Table 5. The Facets Advanced in Assessments of Office Work.
(Multiple Responses to Each Question.)

Facets Advanced.	Number of Times Advanced Distinguished by their Position on their Vessel.	
	Skippers	Deckhands
Success & Progress.	8	3
Freedom & Rspnsblty.	17	12
Variety & Uncrtnty.	15	9
Being at Sea & Intrltnshps.	17	13
	N=57	N=37

all negative, averaged at 2.8 per respondent: Table 6 shows these.

Table 6. The Numbers Advancing Each Level of Multiple Response in Assessing of Office Life.

The Number of Facets Advanced.	The Numbers Advancing Each Multiple Response Distinguished by their Position on their Boat	
	Skippers	Deckhands
1	4	3
2	8	6
3	11	6
4	1	1
	N=24	N=16

Table 7. The Reasons Advanced for Preferring Fishing to all Alternative Jobs Experienced. (Multiple Responses)

Facets Advanced.	Number of Times Advanced Distinguished by their Position on their Vessel.	
	Skippers	Deckhands
Success & Progress.	14	9
Freedom & Rspnsblty.	16	14
Variety & Uncrtnty.	18	10
Being at Sea & Intrltnshps.	14	11
	N=62	N=44

Table 8. The Numbers Advancing Each Level of Multiple Response in Explaining their Preference for Fishing.

The Number of Facets Advanced.	The Numbers Advancing Each Multiple Response Distinguished by their Position on their Boat	
	Skippers	Deckhands
1	1	1
2	6	4
3	15	9
4	2	2
	N=24	N=16

Tables 6 and 7 deal with what the orientations literature described as the best job question; the job that the subjects reported preferring above all jobs that they had had or considered available to them. For example, Gouldner et al., (1968 pp.12-13) asked their subjects if they preferred their present to any previous job that they had had in the present firm, to any other job in that firm (ibid pp.15-7) and to any job that they had had in the past.(ibid pp.33-6) The reasons that they found their subjects preferred other jobs to their own related to the intrinsic qualities of the job. Blackburn and Mann (1979 pp.154-6) asked their subjects what they liked of the best job that they ever had and also found intrinsic qualities to be the most influential factor. Similar questions and results can be found in other studies, such as Chinoy.(1955) Whereas most of the subjects of these studies preferred jobs other than their own the subjects interviewed for this study preferred their current one because they considered that the fisheries, as it was organized, offered more intrinsic and other qualities than any other occupation. Tables 6 and 7 shows the reportage of the facets, all positive, in explaining their preference for the fisheries.

I . Success and Progress.

It was pointed out in Chapters 6 and 7 that studies of fishing elsewhere found a broad concern with success and progress among fishers. While this is not peculiar to the Scottish Fisheries, the desire for success and progress of the fisher subjects is far more extensive than is most usually examined in the orientations to work literature. The examination of success and progress therein is most usually in terms of improvements in income, promotion and/ or consumption. This was so in the Goldthorpe et al., and the Chinoy studies, for example. Chinoy, though, in testing the American Dream, focused more critically on the issue by asking his subjects about their ambitions for both promotion in the factory and self-employment outside of it; he concluded that their

ambitions were little more than self-delusion and, in reality, were limited to improvements in personal consumption. Other than through personal living standards success and progress is most usually only approached through questions of promotion and the subject's evaluations of their promotion desires and prospects with little thought for their sense of achievement. The findings of the fisheries studies mentioned, the Chinoy study and the reports of the subjects of this study indicate that while the question of improvement in living standards is relevant it is insufficient. Also, while it may be possible to develop a career model applicable to fishing the idea of promotion is inapplicable.

A deckhand from a mid-range boat evaluating factory work said:

> "....Fishing is unique. You're living in a small boat with 6 or 7 other men for long periods of time and you all depend on one another. The skipper is your boss, he has sole authority. He decides on when to fish on different weather conditions. He decides whether to stay or go home. He has a lot of responsibility... A skipper is on the same share as the crew. There are easier and harder going skippers, the harder going ones are usually the most fortunate. They make bigger catches and more money and they fish in worse weather. But, it's not so dangerous now, with boats having a cover deck... Now he doesn't need to worry about that and the boat can do better...."

In contrast to working in a factory, fishing offers a unique set of interdependent working relationships for their well being and fishing success. The skipper, nevertheless, has absolute authority on the boat and makes the major decisions concerning where and when to commence, continue and stop fishing. In this there are harder and easier going skippers, of which the former are the most successful. However, the interdependencies of the crew means that these successes and the decision to continue can not be solely the skipper's. As Wadel (1972 p.108) notes, for example, the skipper depends on and has to take account of the crew's sentiments. An interdependent crew can only continue, especially in more risky and/or hazardous situations, when there is a measure of agreement amongst them. Crews are more participative where there is success in such undertakings, which the share system distributes to them, and success facilitates vessel progress which makes it safer and easier to fish in worse weather with more comfort and efficacy.

All of these make fishing quite unlike factory work and contribute to the harmony and success of the social organization of the boat.

A skipper, from a mid-range boat, expressed the following when, first, assessing his factory experiences as an engineer and then his preference for the fisheries.

> "Working as an engineer, I didn't like that at all. There was no sense of achievement in the engineering factory. Here, if you come in with 500 boxes of fish, fine. If you have had to try hard to get them and to work to get them, then you come home feeling good. There was no sense of achievement in the other jobs.... "

> "Fishing, I'd choose fishing every time. There is more sense of achievement in fishing and I like the sea.... In the fishing there is always the big catch as well as the poor one. Fishing is more interesting. We are always improving our boat to make it better.... Every trip is a different one and you can see the success in Peterhead. Look at the houses the fishermen and their families are living in..... That's the fishermen that have done that.... I'd choose fishing every time."

The immediate success of coming in with a good catch, bringing a good income and enhanced consumption is not sufficient: Success must come from having to skillfully hunt out the fish. Success must also be translated into progressive development in the boat and its equipment as well as enhanced consumption. Such success and progress is critically observed by other fishers and others, further enhancing its worth and spurring it. Achievement against the odds, was reported by the next skipper from a mid-range boat:

> "....If the weather is bad there is a lot of pressure. It gives you satisfaction, though, when you get out there and beat it. If you want to achieve something you must work harder although you might not get anything extra in return. We can always be described as achievers...."

A skipper from a mid-range boat explained preferring fishing:

> "It's hard to say. You're not just working for yourself; you get a thrill when you see a crew member start with nothing and getting a house and a car and his family are doing well. If you are getting on in fishing and the boat is doing well and getting on then so is the crew. I put my crew well up in importance. I don't treat crew as a worker, I depend on them..."

The success and progress of the crew and the boat together are reasons for this fisher preferring fishing. Both, together, were reasons for preferring fishing, as the share system allows them to be in a way that a wage system does not. Fishing was preferred because the success and progress of the craft and crew were linked

and they worked consensually together. Such progress and consensus were thought to be not so available elsewhere. A deckhand from a mid-range craft laid the same emphasis on this extensive notion of success as a reason for discounting factory and office work:

> "I couldn't work in an office either. That'd be like working in a factory where today was like the day before and tomorrow will be like today and every day will be like every other day. It's not like that in fishing.... In an office to get on you need to be in with the boss. In fishing it's possible to get on and do well without putting somebody else on the boat down and when the boat is doing well we all are. There are hard times in fishing but its totally different from an office, sometimes the weather is terrible and conditions bad.... You can see from our boat that we do well. We have a good, well equipped, boat..."

A deckhand from an over 100' vessel thought a factory stultifying:

> "I've never worked in a factory and I've never really wanted to. There is little chance to get on in a factory and make something for your family. Here we all work together and can get ahead. The factory might be more comfortable in the winter and you never feel sea sick there. But, have you been aboard any of the boats? Its nothing like the old days. There are now carpets, showers, videos and electronic equipment..."

The fishers here report a preference for success and progress, which were factors found influential for motivation and commitment in the orientations studies, that was more extensive than that reported there. Consequently, there effect for motivation and commitment should be stronger than that found in these studies.

II . Freedom and Responsibility.

Appraising other occupations and explaining their preferences the fishers interviewed considered that fishing afforded them more freedom and preferred patterns of responsibility. This freedom was that from direct, fairly constant, supervision and control and that to exercise control over their own labour. Such freedom, for the boat to function as an effective organization, entails that those so unsupervised work efficiently and effectively on their own initiative, especially as the boat operates in hazardous situations. Both freedoms are socially located ones, the pattern of which varies with occupational and/or ownership position as does the responsibility for their exercise.

It may seem contrary to expectations, given the differences in authority and responsibility associated with occupational and/or

ownership positions, that each occupant of these positions values freedom and responsibility. The freedom and responsibility each affords, within the context of the social organization of the fishing boat, relative to that found or thought available in other jobs and social organizations of production, is what explains the common preference. The crew's interdependence and the constrained nature of the skipper's authority explains the positive evaluation of freedom of the skipper and deckhands. The skipper's operational responsibilities for the boat constricts their exercise of their authority over the crew and the need for self-motivated and flexibly responsive deckhands encourages the skipper to be more diplomatic than dictatorial to ensure effective fishing.

As pointed out in chapter 6 the aspects indicated by the facet of freedom were found in other studies of work to enhance the attractiveness of that work for the worker. Significantly, the realm of that freedom is more extensive than usually addressed in these studies. Because of the closer unity between capital and labour and the more informal authority structure on the vessel this freedom was reported to extend over operational and resource realms of the vessel; skippers were inclined to consult the crew on operational decisions and the crew were inclined to suggest improvements they had spotted on other boats and repairs. The arena of this feature was reported to be, concurring with the findings of fishery studies that considered the issue, more extensive than that found in other occupations and forms of organization by both work studies of these and these fishers.

A deckhand working on a 40-100 ft boat said of factory life:

> "It'd be bad.... It'd be very bad working at the same thing every day... always the same routine with no freedom. It's not like that in the fisheries, with bosses telling you what to do telling you your job. The skipper's the boss but he leaves you to get on with it and he's in the wheelhouse. He's not out telling you your job like they are in a factory. No, it's not like that in the fishing...."

For this fisher, given the choice, fishing was first preference because there was relatively greater freedom from the constant supervision that was thought typical of factory and office work.

The freedom to control the work practice in fishing with the responsibility that entailed was preferred. A deckhand, from a 40-100 ft boat, evaluated a job held in the oil refinery:

> "I had itchy feet, I didn't like it ashore. I didn't like working for a boss.... I couldn't take it. There was too much pressure, there was too much hassle. I was being called out in the middle of the night to repair a breakdown. My wife couldn't take it either. There was too much pressure. Right enough you were always in your own bed at night, otherwise, not like here."

This fishers first preference from this and any other job was fishing because he considered that at sea there was less need to endure the presence of a boss when having to do the work of the job. In consequence there was a greater feeling and appreciation of the relative freedom the fisheries afforded; the work was more a responsibility than an imposition and despite the shore work allowing being at home in bed most nights fishing was preferred.

While, in law, the skipper has ultimate authority over and responsibility for the boat and crew the skipper's authority was described as less permeating of their own tasks than they thought common in shore organizations. The skipper was relied on to locate fish and decide where, when and under what circumstances to begin or cease fishing. If difficulties were encountered in this and the trip had continued with little success for some time then the fishers report that the skipper would be likely to consult them. They report that while the skipper has absolute authority in law the skipper's exercise of that authority was more consultative and less permeating than that exercised in many other occupations.

A deckhand, from a mid-range boat, emphasized working together as a crew in comparatively greater freedom in fishing when asked to assess factory life and when explaining his preference for fishing:

> "...I wouldn't work there. There is no freedom and everyone's getting on at you. Out there you work together as a team; one poor crew member and it all goes to pot. You need to work together and be able to depend on your mates... That's about it, working together out there and being free..."

> "The freedom, the feeling of freedom. In a way you are your own boss out there, nobody is telling you what to do all the time. It's a freer life at fishing than in a factory and there's a better lot on a boat to get on with and you need to keep your

end up.... They're an alright bunch a lads."

Greater freedom was one reason for preferring fishing to either earlier work on the oil industry supply boats or to how factory or office work was thought to be like. This fisher favoured being in charge of, exercising his abilities in, his own work while at sea and being freer from direct supervision. The freedoms and responsibilities within the interdependent social relationships of the social organization of the fishing boat made it preferable.

A skipper from a 40-100 ft boat explained preferring fishing:

> "I don't think that I would take easy to anyone telling me what to do. Most fishermen would feel that way, the crew as well. A good crew gets on well with one another. A good crew works well with one another and doesn't need to be told what to do. Things should work pretty well aboard a fishing boat. They need to work pretty well, nothing else is possible. It's nearly a communist system aboard a fishing boat.... I like my job, I like being skipper..."

This skipper preferred fishing because of the relative greater freedom it afforded. He preferred this to being bossed around in a shore job and considered that most other fishers do also. The preference was for the freedom and responsibilities of a skipper, the responsibilities for the immediate operational and navigational decisions and the long-term ones of the operation, financing, maintenance, improvement and/or renewal of the vessel. Nevertheless, this skipper expressed a need to be able to rely on the crew working well together on their own initiative; the better the crew the more the skipper can concentrate on carrying out the skipper's duties and the more effective and safe their fishing. The crew's freedom and fulfilling their responsibilities are reported to be fundamental for successful fishing.

Staying with the mid-range vessels, another skipper here reported a lack of freedom in a factory and an office:

> "Have I not just answered that? I wouldn't work the hours 9 to 5 every day. I like to come and go as I please. I couldn't stand the discipline of being told what to do. I'm my own boss. I wouldn't take anybody telling me what to do in my work...."

> "Look around you ...see that fire? I now feel as comfortable as in any office. Out there my office is all over the place and it can be cold. You are speaking about being regimented again. I mortally detest being regimented and being ordered about. I mortally detest paperwork. The paperwork is increasing, more of

it is coming in, too much of it. The beauty of the office [the fish selling agent's office] is that I take my paperwork in and toss it down and then the secretaries there take care of it. That's the secretaries job. With a good firm I can trust them; they give me the papers and I sign my name and I can trust them...."

Factory and office work was said to be because of the lack of freedom and of the work being regimented and determined by others in authority. Working as a fisher for a shore based company would not be a desirable or comfortable option for this skipper and would not fit the emphasis on freedom of any fishers. Forby, resenting shore managers influencing operating decisions this skipper would resent them determining the sailing routine, the operating costs and the maintenance, improvement or replacement of the boat and its equipment. The relationship reported with the fish selling agency was an arms length one of entering the office handing over the paperwork, signing any necessary documents and leaving, free from routine paperwork and more able to concentrate on fishing. A general, relatively greater, freedom to work to one's own decisions and responsibilities was preferred.

A skipper from an over 100 ft vessel evaluated factory work:

"Fishermen have gone to a factory when times were hard and have returned to fishing whenever they could. Share fishing is a freer life. It's a freer life at sea than working in a factory. Fishermen are not closed in and ordered by the skipper the way they are in a factory. The skippers are closed in and away from the crew and are controlling the boat. The skippers are responsible for the boat and the crew. Skippers enjoy that responsibility....

This contains the interesting suggestion that fishers have gone reluctantly to factory work when the fishing was doing very badly. The greater freedom of fishing was one reason for this reluctance and preference, as was the responsibility of this freedom; the responsibility for the vessel and for doing the job well with and for the other crew members. In this the skipper depends on the crew doing their work; he depends on them exercising their control over their work and abilities without supervisory direction. In assessing office work and explaining preferring fishing to all others freedom, responsibility and lack of routine are important.

A skipper from an under 40 ft boat explained that fishing was

first preference because it differed from other work in its dissimilar social organization and the freedom that this allowed:

> "Fishing is a way of life. It was a community once but, no longer. It's a challenge of the weather and the sea. It's a challenge finding and catching fish and its free. It's a freer life and nothing like the work I did ashore. It's nothing like factory or office work. Fishing is freer than those for the skipper and the crew...."

For this skipper, working on a small craft, the greater freedom of the fisheries and the responsibility of the challenge of it made it first preference: Fishing presented challenges to exercise his skills in relation to factors normally outside this fisher's ability to effect in most alternate available jobs.

Being responsible for the exercise of such freedom brought responsibilities which were sometimes considerable when working in the hazardous environment, far out at sea. These pressures have been addressed in different ways by scholars.(see Norr and Norr 1978 Kline et al.,1989 for example.) How were these pressures understood by the respondents? When asked to explain why fishing was first preference one skipper replied:

> "I wouldn't like to work in a factory or an office or anything else after all these years. At fishing you are not really closed in and you are putting your life on the line. You can't stop at 5 o'clock if you don't like it or the weather is bad and you may want to give up but you can't. We thrive on pressure and it can be exciting at sea. It gives you great satisfaction. If you want to achieve something you just need to work hard in fishing, although you might not get anything extra in return at times. Skippers and fishers can be described as achievers.... There is some stress in working in an office but there is much more stress working in fishing. We thrive on pressure, though. In fishing you are free and that also makes a difference...."

This skipper understands there to be more pressure in fishing than in an office, but the pressure in fishing is stimulating and rewarding as it enhances the sense of achievement. The crucial differences are the wider control over the circumstances of the activity than available in the office and perceiving his actions having productive effect (see Locke and Latham 1990 for evidence on the importance of efficacy in respect of motivation). Despite there being times when the extra effort adds nothing to the return this skipper considers that fishers are largely in control of the returns from fishing by applying effort. Having the ability to

effect the outcome through exercising one's freedom distinguishes the acceptable from the unacceptable pressures of responsibility.

The importance of the perception of being able to fulfill the responsibilities in differentiating acceptable from unacceptable pressure is transparent in the report of the next skipper from a 40-100 ft boat. When asked what was first preference, he replied:

> "I really don't know. I really don't know what I'm going to do now. I've told you, I'm ashore now because I lost my boat at sea and then had an accident [he broke his wrist] when I was working as a temporary relief skipper on another boat that put me ashore again. My own boat sunk and I planned to build a new one and I have the designs drawn up and the yard waiting. I was all ready to sign the contracts and give them the go ahead after thinking about it a lot but with the new quotas that look like being introduced I have to think again. Even boats that are fully paid for don't know if they can meet their expenses because they are old boats and usually need a lot more repairs.... If I could choose I would choose fishing. That's what I really want but with this situation now with the quotas and so on I don't know if that's possible.
> ....I want to be a successful skipper. I want to be able to say that I'm a good successful skipper.... There is freedom. In an office and a factory there is always someone standing over you, there is always someone breathing down your neck. It doesn't happen like that in fishing so much. The skipper is the boss but not like in a factory because the crew need to know their jobs and the skipper needs a good crew in fishing...."

After a catastrophe this skipper still, basically, wants to be a fisher because fishing offers all fishers a freer life than attainable in most onshore occupations and it is challenging, offering the possibility of a sense of achievement when successful in fishing. The challenges of fishing; those of sailing, of catching enough fish and financing the vessel are part of the responsibilities of skipper that he wants to capably fulfill. But, the loss of his boat and an accident have left him uncertain about his abilities in this and the impending severe quota cuts were compounding a doubt of an ability to restart: Even were he capable of fulfilling the skipper's sailing and fishing responsibilities, he may not be allowed to do this enough to finance a new vessel from scratch. While he wanted to return to fishing as a skipper more than anything else the responsibility of <u>restarting</u> when having recently suffered failure were, despite the availability of grants and loans, in this case, overwhelming him.

The fishers in all occupational categories referred to the

freedom and responsibilities of fishing as reason for preferring fishing to other occupations. The replies of both of these skippers made explicit something of the balance of pressures that the responsibility of this freedom entails and the crucial part played by the perception of personal efficacy. Failure in sailing and or fishing can lead to a serious questioning. Where failure is severe it can lead to a rethink of being skippers, owners, deckhands, etc. Thus, the second skipper was questioning whether to return to fishing at all whereas others, noted above, had returned to being deckhands from being skippers because they came to consider the responsibility of a skipper excessive for them. In the former case there can be a serious rethink of the original life associated with the fisheries. In the latter there can be a move to a new position. In the former the commitment and motivation afforded the fisheries is weakened, in the latter that afforded a particular position is.

Ⅲ .Variety and Uncertainty.

Variety contrasts strongly with features found to be sources of dissatisfaction in many orientations, and other, studies of work; it contrasts with monotony, repetition, tedium, doing the same thing day in day out, etc., etc., which tend to be found to disengage people from the task in hand.

The facet of uncertainty may appear somewhat unique, it is, nevertheless, directly connected to variety. Both inject a potential for excitement and adventure into fishing. In assessing other occupations and explaining their preference for fishing the subjects described the variety and uncertainty they considered the fisheries afforded as stimulating and rewarding. They reported the alternatives to be more routine and mundane in salaries, hours, work, etc., and, consequently, less stimulating and engaging.

Variety entails uncertainty and uncertainty entails variety. Of the fishery, the respondents reported there to be variety and uncertainty in the sailing times, in the time spent ashore, in the

rhythm and timing of fishing activity and in the outcome of such activity at sea and in port. They reported variety and uncertainty in the hunt for fish and guessing until the catch is brought aboard as to its quantity and quality. When aboard there is the variety of responding to the varied times, species composition and characteristics of the catch. This often entails working in bursts of frenzied activity trying to clear the decks for the next haul, especially when a big shoal is located and is being chased.

There was variety and uncertainty in the fishers' incomes also which the respondents reported that they preferred. They reported to especially prefer it to the certainty of a regular weekly wage. This may seem strange or paradoxical but, while there were times when incomes were very low, there were also times when they were very high and the latter were thought to predominate.

A deckhand from a 40-100 ft boat, assessed factory work and office work so:

> "Being stuck in a factory and working at factory production. Standing about in the same place doing the same work everyday, always starting at the same time and finishing at the same time, Monday to Friday. That would be no good,no good at all."

> "What, inside with the same routine every day. No... I suppose it would be alright if you were a playboy, with all those women working there. Though, I suppose I'm not supposed to say that. That's one thing we need here.... No, I don't want to work anywhere like that where the work is always the same and there is no change...."

Both factory and office work was understood to offer a routine constant 9-5, Monday to Friday job that was tedious from lacking variety either in the task or the location and the hours worked. Without a doubt, fishing was first preference because, among other things, it was it was more varied and unlike this in every way.

The next, a deckhand from a mid-range vessel, explained what life was like on an oil industry supply boat in the North Sea:

> "It was a tedious job on the fuel supply boats; loading up and sailing out to the rigs and unloading. Fishing is always changing, its never the same. Three months was all I could take of it. I soon packed it up to come back to fishing...."

Despite working in the same environment at sea the job was thought unvaried and tedious compared to fishing. A deckhand, from an

over 100 ft boat, evaluated personal experience of factory work:

> "Factory life was always the same. Fishing is very different. It is very different every day. No two days are the same at fishing. In a factory you were doing the same thing over and over again and working 9-5 Monday to Friday. That doesn't happen in fishing, it never happens in fishing. There is no routine job and no regular hours in fishing and you are free in fishing. There was no freedom in the factory where I worked and the boss was on to you. I didn't like that....

What was the assessment of office work and why prefer fishing:

> "Office work? I suppose that is a step up the ladder from factory work. Its often seen as a very low class job by shore people is fishing, although it is better rewarded than most. It is better off than routine desk work. Paper work may be cleaner but it is not interesting. Better off fishing where there is no work routine and no clock routine. It is more interesting...."

Fishing was his first preference because fishing was varied and lacked the daily routine of other jobs. Also, while office work maybe considered to have a higher status, especially when many outside fishing may think it a low class occupation, this fisher contends that fishing is a higher class one because it is more varied and interesting than office work and because it brings a higher income and is not managed by a bureaucratic organization. Contrasting with these fishing offers a varied, irregular and relatively unsupervised work pattern and lifestyle. Fishing is largely determined by the nature of its object, the environment of the hunt, the small scale organization which restricts supervisory capacities and the division of labour, the income which covaries with the sporadic and intense work patterns and the success of the trip. A skipper from a mid-range boat explained of office work, then factory work and, finally, his first preference for fishing:

> "There is no comparison between fishing and factory work. There is a sense of freedom in fishing, like, also nothing is certain in fishing. You never know when you are working or when you have time off. You never know when you'll eat or sleep. You work irregular hours out there. In a factory you have a regular life with regular working hours with regular meals. No, that's not for me. In fishing you... work and there is no one bossing you."

> "No comparison. Fishing is fresh air work and it isn't closed in with regular hours and a humdrum life like it is in an office. It'd be very difficult to settle to office work if you've been at sea. Some retired fishermen manage to find jobs in the offices ashore who potter about filling in the rest of their time and maybe that'll be me... but not just yet."

> "It's a more different life than these others... its more interesting. It's a much easier life now, also, with the

hydraulic equipment and onboard computers. Fishing is much more varied and interesting...."

There was no real comparison; fishing offered a more varied and interesting life than the routine and regular, hours, work and location of a factory or office. Fishing begins with a period of slack when the crews on the over 40' boats may watch videos, read books, play games or do some repair work when sailing to the grounds and searching for fish until the shooting and hauling of nets and processing fish begins. This can occur at any time and continues for as long as the fish are being netted and there is hold space. The more intense this is the more exciting and varied the work was reported to be. If there is a break in the run of fish they have to decide whether to search elsewhere. If they do they recommence leisure activity as they would if returning, fully laden, to port. The work pattern is determined by their skill and resolve to hunt and process fish and not by a homogeneous routine.

What is described in this preference for the variety and uncertainty available in fishing contradicts the expectations of either the deskilling or rationalization of production thesis. These reports suggest that insofar as the processes described as deskilling or rationalization, for example, are experienced or are thought to have been realized elsewhere their relative absence in fishing contributes to the preference for fishing and its social organization. These reports contradict suggestions of deskilling, or rationalization, imputed to fishers as effected through the exchange relationships they are involved in and/or the technologies they use. (c.f., Cohen 1987, Clements 1983c)

The last fisher thought it would be very problematic for any fisher to settle to the routines of most shore work. Consequently, there was no optimism about the inevitable of retiring ashore. Technological development was seen positively as making fishing less arduous and, hopefully, postponing retirement.

The following skipper had worked as a motor mechanic for five years and found, despite it being classed a skilled job, that it offered little joy or comfort:

"I hated it, I simply hated it. It was so monotonous, nothing required me to use my initiative. Like I said stripping an engine down and finding out what's wrong with it and fixing a fault, that was good. I enjoyed that. But, it was mostly routine work with routine servicing and routine repairs. It was mostly routine work, regular hours and regular pay. Fishing is not regular, its never the same... each trip is always different and it makes life more interesting for us. We never get regular pay either but we can do well and a big lift of fish is exciting. Sometimes the catch or the price we get is poor and I have to sub the crew but the money is good and sometimes it's very good. It was never like that when I was a motor mechanic. The money was always the same...."

This fisher thought factory work offered little different:

There's no comparison. In fishing we work out at sea and are paid by the catch. It is more interesting and uncertain because of that. There's no uncertainty in a factory with a big order. The crew has incentive; last week they made £760 for the trip this week £100. A shop assistant would hope a queue would dry up. They all get paid a regular wage. I would think that working in a factory would take all the interest out of life but I don't suppose the way we are paid would be good for everybody...."

This fisher hated working work as a motor mechanic because of the routine, repetitive work and pay that it mostly was and which made it insufficiently varied or engaging. Fishing offered none of the routine certainties of a factory, especially one with a big order. The share payment system and the organization of fishing enhanced the uncertainty making it more of an adventure. Because of these things fishing was thought more varied and interesting, offering more incentive to work efficiently and carefully to all the crew. Thus, because the social organization offered this variety and uncertainty it made fishing more engaging and increased any commitment and motivation to sustain it.

This understanding, appreciation, of the relatively greater variety and uncertainty of the fisheries as it was socially organized was expressed in the reports of a deckhand, from a 40-100 ft vessel, first when evaluating experience as an electrician working for a small local firm for a wage and then in assessing factory work and explaining preferring fishing:

"They don't compare. I sometimes liked being a spark, it depended on the job that I was on; if I was installing a central heating system with ducting and all, a big central heating system in a nice house that was good,it was o.k., then. If I was working in an old house with all the dirt and dust and nails sticking out then no, I didn't like that. The sea is cleaner and healthier. Being an engineer I'm sometimes covered in oil but it doesn't bother me the same way and being under

cover lubricating the engine isn't all that I do. I don't have to change the oil very often, only when we have a very big hydraulic leak but, you're not doing that every day...."

"....It's a freer job at sea. I don't fancy a factory job, being closed in and confined and working at the same work all the time. We are not working 7-5 every day on the same work, no, we are not...."

"....It's different, it's always different. There is no routine, the weather is always different and never the same.... Even your pay is different and never the same in fishing. But you can get a real good lift some weeks and that's really good...."

A deckhand, on the same boat class, explained preferring fishing:

"I think I would still go back to the sea if I was to go back to when I was young like. I was talking to my father the other day, who is retired from the fishing now, and he said that he would do the same thing all over again. I choose fishing.... At fishing your pay can vary a lot with one week a huge pay and the next week a small pay. Quite a lot of fishermen can make £1000 in a trip. I've done so many times. My son recently made £1000 a trip on three separate trips. You're fair cheered by a big lift. You don't get that when you're paid a wage in a factory. True, you don't get a small wage either...it's always the same..."

The first deckhand noted liking aspects of work as an electrician for a small firm, nevertheless, he only worked at such for only one year after completing his apprenticeship preferring fishing because, among other things, it was always varied and held many stimulating uncertainties. Both fishers said the substantial variability and uncertainty in their income increased the interest and preference of fishing. They preferred uncertainty and variety because of the excitement and adventure of the possibility of large hauls, taken over a single serious of trawls, with work and excitement that usually transforms into a big pay; when the pay does not match that excitement there is equal disappointment.

A sense of adventure comes out of the performance and income differences and is at the core of the variety and uncertainty reported by the fisher respondents. Such differences contribute to the contrast between fishing and the alternatives, either evaluated from experience or from outside impressions and to the preference for fishing with its distinctive, informal, social organization. In contrast to the regularities and certainties that these fishers thought marked the alternatives to fishing, with dissimilar social organizations, they considered fishing was

characterized by variety and uncertainty. While there sometimes were disappointments, their preference reports indicate that these fishers considered fishing to be more engaging and less subject of feature such as routine, regularity, unchanging monotony, constant and homogeneous temporal patterns, that other studies of work usually found to be sources of disengagement, dissatisfaction and disharmony. In this sense these facets of their orientation indicate the availability of features that others were found to hanker after, if not obtain in their work, by the orientations and other studies, strengthening the social organization.

Ⅳ.Being at Sea and Interrelationships.

The facets being at sea and interrelationship address both unique and common aspects of fishing when it is compared with other occupations. Being out in the open at sea is an identifying feature which makes fishing quite different from other productive activities or occupations. If catching fish and making money were considered the intentional goals of fishing then being at sea and interrelationships would be considered a means to attaining them. Being out at sea is also to be out in a hazardous environment; other studies have found that working in a hazardous environment tends to foster interdependence in the groups working in such an environment. Gouldner's (1954) study of workers in a gypsum plant found the miners, working below in the hazards of the mine to be more sociable than their surface colleagues in the same plant and community situation. (Contrary to Cohen's thesis. 1987)

A central point of the miner's orientation that Gouldner reported was an opposition to the authority of those trying to command and routinize their work. Interestingly, though, those in authority who worked in the same environment as the miners he found to be less dictatorial and strict than those in authority positions on the surface. Moreover, Gouldner found that the sociability of the miners included those working in authority alongside them due to shared risk and informal command style. This

stands in stark contrast to the relationships among the fishing crews on the company owned trawler fleets

Being out in the open sea, then, can be considered conducive to interdependent and more harmonious social relationships amongst the crew. However, hazardous environments do not guarantee the appearance of harmonious social relationships amongst all facing the common hazards, as the history of the company owned fishing fleets indicate. Studies of that fishing (Thompson et al.,1982 Tunstall 1963) found evidence of considerable conflict between the skippers and the deckhands and between both them and the vessels' company owners. Interdependence alone does not guarantee harmony. However, the social organization and remuneration system currently predominant on Scottish fishing boats actively fosters harmony because there are no large companies ashore not facing the risk and attempting to prevail in control of fishing practice and because of the relative equality in the distribution of the boat's income amongst crew and owners. If an oppositional element in their orientation exists it is to any outside interference in their fishing, as in their dislike of bureaucracy.

In evaluating factory work an over 100 ft boat skipper stated:

> "Being confined to a factory... being shut inside... just a factory? No, I can't do that, I can't be inside all the time.... Fishermen were not born to that, they can't be in a factory, they need to go to sea. Fishermen need to be at sea and they need to be free. Fishermen can't be in a factory they need to be out in the open. Fishermen won't be ordered around on a boat. Fishermen are independent minded people.... I need a good crew that can be relied on to do their job.It can't be done any other way....When we're out at sea there is only us and nobody else."

An enclosed environment is an extremely uncomfortable one for this skipper who considers it to be so for all fishers as they need to be out in the open, at sea. Furthermore, when they are at sea they are very much alone and interdependent and, partly due to this, they need to have good social relationships. As a skipper he considers that his crew cannot be <u>ordered around</u> as they <u>need</u> and <u>expect</u> freedom; his authority, absolute in law, is constrained in its practice by the crew's interdependence and the deckhands' expectations. Interdependence such as this requires flexibly

responsive and skilled fishers. When asked what was preferred from amongst any occupation this skipper selected fishing because:

> "....You're not shut up and it is a freer life than in a factory or an office. It's a challenge is fishing. You are always fighting nature and it's only yourselves that are responsible.... When I'm ashore I'm away from that, I'm away from the sea and with my family and that is good. But I'm soon wanting back to sea. After a few days I'm pacing up and down and I have to go to sea again. Then I phone around the crew and we go back to sea.... I can't stay ashore for very long...."

Being ashore for any time becomes intolerable; here is an urgent desire to return to sea. Fishing was preferred because of, among other things, being out at sea and facing the challenge of the sea which brings a deeper sense of success. A deckhand from this boat category explained why his preference was for fishing rather than the previous work either in a factory or on an oil supply vessel:

> "Definitely here, working on a fishing boat out at sea. There is no one at you there. In the oil and in the other jobs they were always breathing down your neck and I don't imagine anything else would be any different. I'd definitely choose the sea and fishing. It's a freer life.... Definitely the sea and fishing...."

And a deckhand, from a 40-100 ft boat, assessed factory work:

> "....A factory is not fresh air work, it's too closed in. I wouldn't work there. There is no freedom and everyone's getting on at you. Out at sea you work as a team, one poor crew member and it all goes to pot... That's about it; working together out there is better than working in any factory. A factory is just too closed in for me...."

Fishing was the first preference because of:

> "The freedom, the feeling of freedom and being at sea.... It's a freer life at fishing and there's a better lot on a boat to get on with.... They're an awright bunch of lads. They need to be with everyone living and working together out there...."

Both prefer the freedom of working together on a fishing boat at sea with a good, interdependent, crew. But, it was not just being at sea it was being at sea on a fishing boat which had a distinct social organization and social relationships, better than those on the oil supply boat. The dissimilarity in the social relations of of a fishing vessel was critical for preferring fishing; working with 'an awright bunch of lads..". A deckhand, from a 40-100 ft boat, preferred fishing to earlier experience in a factory as a machinist because of being at sea and the companionship:

> "....I would rather be at sea, there's nothing like it. When you

> are 200 miles out at sea you depend on yourself and the rest of the crew and that's it. Everybody needs to know there own job and know what they're doing and not have to be told....Everybody needs to get on together; we eat, sleep, live and work together for days on end and are longer together than we're with our families.... There's not such a good lot in any other workplace as there is on a fishing boat. They're not such a good lot in a factory or in any other jobs that I can think of..."

This risk brings fishers, who were fundamentally incompatible with indoor work, together as an interdependent social unit on a fishing vessel: The interdependent companionship on a fishing boat at sea was quite unlike the social relationships in that factory and what were imagined to be found in most other job situations. Their efficacious interdependence in fishing means that these social relationships are considered beneficial and that each fisher is using their initiative and skills.

A deckhand on a mid-range boat who had been a self-employed taxi driver said there was a similar sense of freedom there:

> "I was a self-employed taxi driver, like I told you. It was much the same as with fishing; when the work needed to be done you did it and I was in control. I could decide when I wanted to work or not... Like the fishing there was a lot of freedom. I was on my own all the time, though, except for the fare I suppose. There wasn't much else about it...."

There were similarities in that the work was not regulated and routine. There was a similar experience of freedom both over the work and from supervision, also. When explaining a preference for fishing he emphasized that the freedom and social relationships on the fishing boat added to this freedom and the responsibility that it incurred: The freedom was embedded within valued social relationships that were interdependent for success and safety.

A skipper from an under 40 ft boat evaluated past experience in a number of work environments and concluded that:

> "There's nae real comparison, nae real comparison at all. There is nae real comparison between being at sea in a boat where we're out in the open....There was not the same comradeship in any of the jobs that I had before. There's no back stabbing and not the conflict there was there. Nobody has anything to gain from back stabbing on a boat or going on strike and so on...."

Being out at sea and the ensuing interrelationships between crew members were reasons for preferring fishing to any other jobs experienced or assessed: None of these alternative jobs afforded

the qualities found in fishing as it was then socially organized.

In these fishers' reports being out at sea and the social relationships of interdependency that ensues from working in such an environment within the social organization of the Scottish Fishing boats were reported as preferred make fishing more desirable than other jobs with their different social organization.

Conclusion.

In either assessing other jobs or expressing their first preference these fishers used the orientation facets to express either positive or negative evaluations of these alternatives and to discount them as less desirable than fishing. In this they either offered some positive assessments of other occupations with their dissimilar social organization, because they offered smaller portions of these facets or, more often, they offered negative assessments of these others because they offered nothing of these facets. The others with their dissimilar social organization either offered insufficient or nothing of the features thought important by these fishers and desired and expected of their occupational activity. Only fishing, as then socially organized, was thought to offer a substantial quantity and range of success and progress, freedom and responsibility, variety and uncertainty and being at sea and interrelationships. In being seen by these fishers as offering this more extensive range, fishing and its social organization was seen as offering more of what has generally been found in the literature on orientations and in other studies, to be important for satisfaction, commitment and motivation to organizations. In meeting these preferences these fishers' commitment and motivation to fishing was strengthened, sustaining its social organization. To the extent that this orientation was widespread, non-fishers connected with fishing were dissuaded from attempting to reorganize it.

Introduction.

In this chapter the subjects' perceptions and evaluations of the share system of distributing the vessel's income and of their own incomes will be examined first. It will be shown that their perceptions and evaluations of the share system were integral with their perceptions and evaluations of the social organization of the fisheries.

After this the career and ownership ambitions of the fisher subjects will be examined. This will show the following: 1. That there is a connection in the respondents' perceptions between studying for a skipper's papers and majority share ownership in a vessel. 2. That those who had studied for a skipper's papers explained that they had primarily done this to become a majority share owning skipper. 3. Some who achieved this ambition found the responsibility of the dual occupational and ownership position excessive; they returned to being non-share owning deckhands who occasionally worked as relief skippers. 4. Awareness of the responsibilities of a majority share owning skipper and the financial costs of attaining both along with the respondent's life cycle position were the reasons advanced for not wanting to become a skipper or share owner. 5. Others who achieved this ambition to become majority share owning skippers were proud of their achievement where they were successful skippers. Where they had reason to consider that they had failed at this there was evidence of their being fraught with anxiety and uncertainty. 6. Personal skills and knowledge which permitted calculated, safe, risk taking

which were seen as immeasurably improving fishing performance. This view constrained the ambitions for share owning and non-share owning subjects to shares in boats where they were personally involved and informed of the circumstances of the operation and capabilities of the boat and their crew. 7. To consider extending share ownership beyond a single vessel was only possible in very limited clearly defined conditions; either for one other boat that they operated with in a pair trawling team or for to aid another fisher to become an independent majority share owning skipper, like themselves. The extent of both the actual, and the ambition for, ownership of vessels reported by this sample of fishers was very constrained and their explanation of their occupational and ownership ambitions was very supportive of small scale, independent fisher ownership of boats.

The Fisher Respondents Perceptions of the Share System.

The share system was described in detail in Chapter 2 above. Essentially, the income from each fishing trip, after the expenses for the trip were subtracted, was divided equally in half. One half went to the boat owners in direct proportion to the share of the boat that they owned and the other was distributed equally amongst all of the crew members. The former was called, by the fishers the boat share and the latter the labour share. Crew members with shares in the boat received both a labour share, for their work, and a boat share, proportionate to their ownership.

In describing the share system in Chapter 2 a contrast was drawn between the share system employed on the fisher owned boats and the wage system employed on the shore company owned fleets. It was pointed out that the latter were more conflict ridden than the former. The latter were subject to conflict in the social relations aboard the vessel and between the vessels' crews and the shore owners. Despite both crews working on a small boat in the vast sea and being confronted by the same dangers while fishing the skippers on the latter were described as more authoritarian in

their command style and the deckhands less motivated than those on the former. The share system provides a social context unlike that provided by a wage system. The share system can be thought to distribute the boat's income more equitably with the common risks faced by the crews and owners, particularly when the owners also go to sea on the boat. Thus, while there was a tendency to emphasize the common working environment and risk as the generator of good social relations amongst workers (e.g.,Gouldner 1954) here it is contended that the method of income distribution and the social organization are the crucial factors in the context of a hazardous work environment.

The fishers in the sample thought that the share system was by far the fairest system possible. What they thought of the efficacy of the share system for the Scottish Fisheries can be divided into past, present and future: Most thought that it had been very efficient for their boat and the fisheries in general up until the present. They understood the fisher owned boats to be predominant in the Scottish Fisheries and that the share system employed on these boats explained the prosperity of the Scottish Fisheries. Some fishers interviewed over the winter of 1988-9 suggested, however, that there were pressures pushing towards modifications in the system, which they were unhappy about.[1] Historical precedents (see Chapter 2) of changes in the system exist: First, in the introduction of line shares into the division of the fishing boat's income from the late 18th century and of a net share in herring fishing from the early 19th century. Second, in the increase of the boat share from a single crew share to half of the net income, after the deduction of expenses, of the trip. Third, in the payments uncertified skippers paid to qualified deckhands for their for taking legal responsibility for the boat. Fourth, in the inclusion of rental charges for some electronic equipment into the expenses category. These modifications were reported as not affecting the basic principle of the system, but were they to be continuous and cumulative they eventually would.

Of the respondents interviewed 14 of the skippers and 10 of the deckhands thought the system was very fair in distributing the income for the trip amongst the owners and the crew and very effective for the reproduction of the vessel and fleet the other 10 skippers and 6 deckhands thought it was fair and efficient. Both, nevertheless, contended that the use of the system explained the success of the fisher owned fleet, which they equated with the Scottish Fishery, and the decline of the company owned fleets.

A skipper from a mid-range boat explained why the system was both fair and effective:

> "It's not like working in a factory where the owner and the manager get a bigger salary than the workers. Everybody gets the same share and the more we catch the more we work and the bigger the share. Working on a fishing boat is very democratic; everybody gets paid the same and everybody needs to know their jobs and get on with them and do them well. There's nobody to tell you what to do. We couldnae work with a wage; the industry would go under like that. The Peterhead fleet is doing well but the Aberdeen fleet's long gone...."

This skipper thought the system fair because it did not generate any great income inequalities, regardless of whether they were skippers, owners or deckhands like in a factory hierarchy of authority. The share system was thought both fairer and more effective because it related the fisher's income directly to the performance of the boat and the work they did; also, there was no authority structure comparable with the complex bureaucracy of a factory. Consequently, everyone was in command of their own arena of responsibility and were paid accordingly as they fulfilled it.

To illustrate this direct comparison was drawn with the failure of the wage paying company trawlers. A deckhand from the same vessel group drew the same comparison:

> "....Definitely. If a big company gets in I don't hold out much for the future. It might happen, it's maybe what's happening; that new million and a half pound boat in the harbour is not all paid for by the skipper. There's big company involvement there. That's what killed the Aberdeen fishing; big companies paying a wage. The share rewards the crew that's doing well and working hard. It's undoubtedly fair and efficient. That's what explains the 200 yrs success of Peterhead, the share system. The share system tells you all you need to know about the fishing..."

This deckhand thought, that the share system, as operated on the fisher owned and controlled craft operating out of Peterhead,

explained their past and present achievements and progress in contrast to the failure of the wage paying company owned trawler fleets that operated out of Aberdeen. The deckhand was very wary of an ever present danger of a big company entering the fisheries and altering the predominant social organization and system of remuneration there. The understanding was that this alteration would destroy the incentives for the crew to work carefully and effectively and the social relationships of self-motivated interdependence that fishers rely on and are successful by. For this fisher such a change would destroy the Scottish Fisheries, not only the social structure of the fisheries; the share system and the social organization were seen as interlinked.

The orientation of the fishers in the sample opposed company reorganization of the fisheries as they considered this would be less efficient and less equitable. They were wary of such a reorganization because they thought it would replicate the failure of the company owned trawl fleets and debase many of the qualities of the experience of fishing that made it desirable and more efficient. The next deckhand from a mid-range vessel echoed these sentiments while also making apparent the element of uncertainty as contributing to the desirability of the system:

> "....There is less incentive in a wage system than there is in the share system. On a wage system you get the same whatever you produce. With the share system you get more but you can also get nothing. The share system is more uncertain than a wage system but you can get a big shot of fish and a big pay. There is more incentive to work and make and get more money."

The system was fairer and efficient and the uncertainty of the income that would be picked up at the end of the trip enhanced the interest of fishing because there was always the possibility of getting a very big pay well over the average. In the risk of receiving a small pay there was an edge of adventure. This was reported by the next skipper from a 40-100 ft vessel:

> "It's very fair. It works very well for the fishing. It rewards the crews and the owners. It rewards the crews for working hard and working good. The crews don't get paid well in the poor times when the catch or the price isn't very good but on the good trips they do very well. In the good times we always do very well and the good times are far more common

than the bad times. It has worked very well in the past. It has worked very well in the last 20 years or so...."

The system was fair and efficient, this skipper thought, because while in a poor trip the crews got very little in the more usual good trips the crew did very well and they had an incentive to work skillfully and hard. In referring to the recent period of unprecedented prosperity, the system was seen as contributing to that prosperity and distributing it amongst the crews and owners with considerable equity. In referring to this period of especially strong growth and development the system was seen as having encouraged both the crews to work and the investment in new vessels and equipment. The next fisher, a deckhand from a mid-range vessel, repeated this view:

"....I worked on the trawlers out of Aberdeen there was not the same helping one another out there as there is on a boat out of Peterhead. Out of Aberdeen the crew were paid a wage and there was no comradeship like here and the skipper and the mate got a good bit extra. The trawler fleet's gone now and just look at the fishing in Peterhead. The boys here are doing well. The boys here are doing very well...."

While the trawlers also operated in hazardous environments hunting the same elusive, variably located and caught fish he says that there was not the same quality of social relations of self-motivated mutual support and help amongst the trawler crews; there was not the same quality of interrelationships and interdependence amongst the crews on the trawlers as there was amongst the fishers on a owned share boat. The difference in the situations was in the social structure of vessel ownership with the use of a wage system generating an unequal distribution of income on the trawlers which did not befit the risks faced and effort invested. This inequality was apparent in the trawler owners and skippers living in separate areas of better quality housing to their crews.(c.f.,Tunstall 1963) A deckhand from an over 100 ft vessel also spoke of the poorer social relationships aboard the trawler fleet vessels when explaining the effectiveness of the share system:

"Trawling went, one reason was the loss of grounds off Iceland but they were company ships, of course, paying wages. The trawler fleet went but before that, in the 1960's and 70's things began to improve considerably for the share fleet here.

> When the trawler fleet were still running the fleet here were weekly trippers. All home at the weekend. We still are. It is really the share system that explains the success of the fisheries here in Peterhead. On the trawler fleet there was no incentive to work or take care of the fish they were catching and there was strikes and arguments over working...."

The Peterhead fleet had prospered, in contrast to the trawler fleet, this deckhand said, because of the formers use of the share system. The trawlers declined after the expansion in the growth in the fisher owned fleets because of their different system of income distribution and ownership structure. A skipper from a mid-range boat explained why the system was fair and efficient:

> "All the fishing fleet here are small businesses, not like the trawler fleet were. The trawler fleet were all company owned boats where the men were paid a wage and they were not on a share. The men had no interest in fishing and they did not take care of the catch. Here the owners fish in their own boats with the crews and they get a share like the rest. If it weren't the share system nobody would put in the hours. Do you know how much I would have to pay if I paid wages? There would be basic wages, overtime, overtime bonuses, holiday pay and the rest. The pay is better on a share. The crew earn more on a share. The bulk of us like it and like the fishing. There can be long hours, sometimes up to 50 hours non-stop fishing but we don't mind that because we are working on a share and doing well out of it...."

Evaluating the efficiency and fairness of the share system this skipper drew a contrast with the company owned, wage paying fleet. trawlers. The crew would be less self-motivated to work carefully to maintain the quality of the catch and less willing to work flexibly in the patterns and length of time were they paid wages and working on shore company owned boats. Thus, the availability of flexibly responsive labour this fisher located in the fisher ownership of vessels and the equity of the distribution of income befitting the shared risks of the owners and non-owners who went to sea together. The contrast was between the inequality and inflexibility of an organization with an extended hierarchical structure and routinized work pattern paying wages <u>and</u> the equality and flexibility of the smaller fisher owned organizations which distributed their income through the share system.

<u>Modifying Perceptions of a Pressures to Modify</u>.

During the second set of interviews there was a feeling of a

fundamental crisis building up in the fisheries. This came from a number of sources, the essentials of which were apparently growing ecological problems in the reproduction of essential fish stocks which were reflected in reduced catch quantities and quality for the affected species, in the simultaneous decline in the price fetched for the fewer fish landed, in the drastic quota reductions and in increasing cost: rising interest rates, fuel, equipment and maintenance costs. These difficulties were seen as the possible sources for modifications in the system. Before looking at these it needs to be stressed, however, that a, this was one of many solutions being proposed by the fishers to solve the problems encountered then, b, possible modification, not eradication, of the share system was spoken of, c, historical precedents existed in which modifications left the basic equity of the system intact, d, these pressures were affecting different boats unequally, and e, modification was potentially destructive of the system and organization that the respondents, including those suggesting that modifications were necessary or pending, thought to be fair and efficient. While there was talk of impending modifications there were reasons in the fishers' reports, even of those who spoke of the modifications, why they would either not be implemented or be of a restricted form.

Both positive appreciation of the system as it operated in the past and discussion of pressures building up for change are expressed by a skipper from a mid-range vessel to explain why he thought the system had been fair and effective but was endangered:

> "It's given the crews incentive to work whenever they needed to. In the trawling the crews were paid a wage,that was one of the reasons that they went out of business. It's been the best method for the deckhands and its been good for the boats.... I think, though, that there is going to be a bit of a change the way things are going with the poor quality catches and the 60% reduction in quotas that are being implemented. I think some of the crews are going to get a bit less or the boats could cut down on the crew as a solution; the conveyor belt system has made the gutting machine more feasible. Before they were fed by hand when they were first introduced and they didn't work too well. Some boats that have introduced them recently have reduced their crew by one and taken a crew share to cover the cost of putting the machines in. That is just now, not a lot of boats

have them. The crews tend not to be too happy about it. Up until 5 years ago there were an average of 8 of a crew [for 40-100 ft boats] now the boats can manage with 6 of a crew. When a crew member leaves or moves on they sometimes don't replace him when improvements in the boat mean they don't need so many anymore."

The skipper explained that the incentives and social relations were better on the fisher owned boats where the income was distributed by the share system than they were on the company owned trawlers. The share system was better both for the deckhands and for fostering the success and progress of the vessels. But, there were, he stated, pressures putting strain on the system. One solution to these would be by reducing crewing levels through labour saving investment whereby the crew share saved would be taken for the new equipment as part of the boat share and the rest of the crew's income would remain unaltered. Before, labour saving equipment that reduced crew levels resulted in a bigger labour share for all the remaining crew members and owners. There were precedents for this type of equipment share in the form of line or net shares but there was suggestion of emerging discontent amongst the deckhands over this development.

Another skipper, from a mid-size vessel, also pointed to pressures to change the system when explaining its earlier fairness and efficacy and the reason why it could be altered:

"It's been fair and efficient up until now for the boats and the crew but now the boats and the equipment are getting too expensive and the share system will need to change. As it is now, say the gross for the trip is £10,000 and the expenses are £2,500, these are both average for a trip, then after the expenses are subtracted the remainder is divided into the boat share and the crew share and we have 7 of a crew. Why should the skipper have all the worry,the worry of catching the fish, the worry of the worth of the fish, the worry of the sea and the worry of the ship or the business and still get the same. O.K., he gets a share of the boat share but it should be that the boat share was 55% and the crew share 45% after the expenses have need subtracted. The only problem is that you won't get every one to agree to do it because some boats are paid off and are in different financial circumstances and they would behave differently towards their crew. Skippers can never agree on anything. In the past some crews were making big money and the interest on the boats were building up unpaid in the bank. That doesn't make good economic sense. Some boats are going out of Peterhead and the skippers only worry about what the crew'll get. They like to see the crew get a big pay. But there are big differences; some boats add the interest to their expenses and subtract it before dividing the money between the boat and the crew. It's the same in all parts of the fishing; you can't get agreement when you need to introduce changes..."

The skipper reported that the system had been fair and efficient up until the present. But, the skipper was feeling the pressures of reduced catch quantities, quality and prices with increased restrictions on fishing opportunities and rising cost intensely. What was recorded earlier as the disliked features, by skippers and deckhands of lengthening trips, poor catches and poor prices was being expressed here in terms of the responsibilities of the skippers' post. This skipper was particularly sensitive to these responsibilities having recently lost his boat and been worrying whether to commission the construction of a replacement boat at a time when the fishery seemed to be entering an ecological crisis. When the skipper was ready, despite the loss of self-confidence, to sign the papers which would start the construction there was the announcement of 60% and 40% reductions in the quotas of major species the signing was put off. The skipper was fretting over the potential incomes and expenses of a new boat when available grants were more constrained than earlier and costs were rising at a time when he did not consider himself to be a successful, progressing, skipper. The modification to the system he was suggesting was in the division between the boat and the crew share in favour of the former after the deduction of expenses. The skipper was suggesting that the balance in the pressures of responsibilities had shifted which needed to be reflected in the balance and equity of the income distribution, given that the crews did very well from their labour share. A curiosity was why the skipper did not consider it possible to introduce the interest costs into the expenses when reporting that other boats had done so already and that lack of agreement amongst fishers prevented the implementation of change; neither his enthusiasm to change the system nor the extensiveness of the modifications could have been very great.

There was a suggestion that the banks were promoting some of these changes. The next skipper reported this but, curiously, despite the fierce independence expressed elsewhere he did not suggest that the banks were impinging on his freedom:

"Up until now, yes. The system has been very fair because it has paid the fishers good and allowed the skippers to invest in their boats. A wage system is no good in the fisheries. It may be alright elsewhere but it is no good for the fisheries. It's been fair and good up until now but it's changing. A lot of the boats are moving to a 60%-40% division between the boat share and the crew share. It's quickly moving to that situation as it is. You have no choice and neither have the crew; we have to put up with it. It's the banks that are making the suggestion. They want regular payments every month. We have to pay off the loan capital as well as the interest.... The banks were aware of the ups and the downs in the industry. They were really quite good because they took a long term view of it over years, 4,5,6,7 or 8 years. Now with things changing so quickly they are looking for steady monthly payments and you need to meet them regular. Some people were getting into a lot of trouble. They were getting into debt and difficulty before. Now to prevent that you need to pay part of the capital as well as the interest, even if it is only by a very small amount....

Those with old boats maybe have smaller returns, but they are still better off because they don't have the same debts or loans and interest payments. Right enough they have more repairs to do, but it is them that will survive this situation

If you have a crew that are earning 13 to 14 or 15 thousand pounds a year, which many of them are doing, and the boat is not even breaking even then you need to look at the situation. The maintenance and labour costs of work is tremendous and the shore businesses don't go unpaid if the fish go down in price. We have to tell our boys there is nothing, we have to face our boys and tell them there is nothing, they don't have to do that. They don't have to face that in the shore businesses. If you don't usually get a good catch then the crew will leave. Some of the older ones are more loyal than the younger ones.... I would say that there was no industry like it where you can come home with no money and have to give the crew a sub; who would pay wages in this industry?"

This fisher had stated that the share system had been very fair and efficacious for their boat, and for the fishery in general, in the incomes their crews could obtain and in fishers ability to invest in their vessels and equipment. He commends the efficacy of the system for the fisheries and emphasizes the inapplicability of a wage system therein. However, he states that other boats had, or were, modifying the proportioning of the net income in favour of the boat share, mostly at the insistence of the banks. The banks were doing this to ensure a continuous payment of interest and a deduction, even if slight, from the capital. The banks' experience of fishers accumulating debts at times with the then current trends in the fishery were opening up the possibility of boats getting out of their depth in debt, were the reasons for this, he suggests. From taking a confident long term view that the cycles the would iron out favourably for the fishers in the long run the

banks, this fisher says, are taking a less sanguine and lenient approach and were requiring fishers to continuously repay at least part of their debt and were suggesting ways for them to do so.

Yet, it was other vessels that have carried out the changes and, despite the central and coordinating role that the banks had, this skipper felt constrained by the heterogeneity of the various fishing vessels' financial positions in implementing any changes himself. Within the remarks of this skipper there are conflictual tensions in his understanding of the situation and his attitude towards the crew: On the one hand the crew's income he thought to be very good and, unlike the bills for maintenance work, within his power to try and influence. On the other hand, the report suggests that the skipper thinks that this influence is highly constrained. Also, it suggests that he feels very bad and largely responsible when there has been a very poor income from a trip and that the crew would leave if the boat repeatedly performed poorly. This suggests that the deckhands have some independence from the skipper's decisions as well as influence over the decision making processes. Of the relationships amongst the crew this reply indicates a relationship of interdependence.

Essentially these fishers' evaluations of the equity and efficacy of the share system were that the system was far better in this for their boats and the fishery than the wage system alternative that was predominant elsewhere. This was especially so as they contrasted it with the system in the company owned trawlers. This was true of all the fisher respondents. They said that this could be seen in the success of the Peterhead boats and the decline of the Aberdeen company fleets. All of these fishers reported this of the share system and while some spoke of modification of, none spoke of eradication of, the system. While, the fisher subjects spoke positively of the principle behind the system, as distributing the boat's income amongst the owners and crews according to their respective and common risks while eliciting optimal performances, in suggesting modifications to the

system were impending or necessary they were pointing to potential threats to the system: None, though, spoke of replacing it with anything like a wage system. The most curious aspects of this talk of modification was that it had not been implemented on the boat that the person suggesting it was on, and they did not see it as possible or practical to implement.

Of course, those discussing modification to the system were reacting to the pressures of the immediate situation and they were hypothesizing many possible courses of action that would surmount the problems. Modification to the system was only one option; one which looked very unlikely to be implemented because of their reckoned disagreement amongst fishers over change in the system and their perceptions of the effectiveness of it, given their more general confidence in the system's efficacy. The most curious aspect of the reports was the willingness of these subjects to consider modification as a possible option when asked to give their evaluation of it. However, when asked their assessment of the current situation and future prospects of themselves and the fisheries and to suggest necessary and optimal solutions to the problems that they reported faced the fishers who had suggested there were needs for modification in the share system focused solely on the need for better fishing tactics, for ecological measures, for decommissioning grants and so on as solutions. None mentioned modification of the share system as a way to deal with any of the problems they seen themselves and the fisheries facing: such modification had a very low priority and/or considered feasibility for implementation and successful operation without generating detrimental effects for the operation of their fishing vessel that outweighed any benefits.[2]

The Respondents' Perceptions of their Incomes.

There is a curious tendency in some studies of fishers to contend that they are subject to financial pressures which are causing deskilling and exploitation through unequal exchange

relationships and/or that they are being forced to fish beyond their willing endurance by financial pressure while pointing to a great deal of conspicuous consumption among these fishers. This was true of Cohen,(1987) for example and was also remarked in personal communication, by Neil Guppy of his study.

The attempt was made here to uncover not only whether the subjects were satisfied with their incomes but also whether they thought their incomes were good or bad. To achieve this the question was composed in such a way that if the incomes were bad and living standards inadequate or very poor that it might provoke exclamation that fishing offered them poor incomes but that either their was no other work or there were compensating factors which kept them in the fisheries. Overall, the answers to the question; "Do you think that fishing offers you a very good income or standard of living?" were vigorously positive for all ownership or occupational categories of respondents. The only qualification to appear was in the assessments of the prospects for their future incomes of the fishers interviewed during the second phase of the fieldwork. Despite their very positive evaluation of the incomes that the fisheries afforded, all were sensitive to the fishery's cyclic tendencies. A deckhand from a mid-range boat said:

> "Look at Henderson Circle [an area of very expensive detached and semi-detached solid middle class housing where this and many other fishers lived] that will show you how good an income the fishers make. I would say that it does give me a very good income.... It may fluctuate a lot, but over the years it does give a very good income."

Thus, while the fisheries were subject to cyclic tendencies as well as variability between trips and seasons which affected their incomes this deckhand considered that the fisheries provided a very good income to all fishers, not only skippers and/or owners. Incomes fluctuated, but overall they provided a progressive cumulation in his and other fishers living standard. A skipper with a mid-range boat said:

> "Look around you. Have you looked around this room or this house? This is my house, not any building societies house. How many can say that? It [fishing] offers you a high enough standard of living if you put the effort into it. Who could

> afford this working in a factory or office?... But, no factory or office worker has to put up with the conditions that we have to put up with."

Indeed the house was big and centrally heated and with a coal fire burning vigorously in the grate and the room was full of many pieces of modern electrical equipment and expensive furniture. As well as thinking the income and standard of living good the fisher compared his position better to many others in shore jobs; the relatively good income earned was justified, of course, by the effort which was required to obtain it. Another skipper from a mid-range craft replied similarly:

> "Yes, I would say that it has me.... Yes, wouldn't you say from what you've seen around here, around Peterhead that we do? Yes, I get a very good income from fishing...."

This skipper considered that not only he but that fishers in general got very good income and standard of living from the fisheries. A deckhand, from the same size of craft, pointed to progressive achievements of both himself and other fishers when evaluating the income and living standards fishing afforded:

> "Well, I have been a deckhand and [he looked around him indicating the room to me] this was a council house. I've bought it and altered it to suit myself. I've run a car for 25 years and raised four of a family and they didn't want for anything that they needed. I think that I've done very well out of it. I've done very well...."

This deckhand thought that the fisheries provided a very good income and standard of living which were measured by the achievements of having raised a family, buying and substantially altering and upgrading the house that they lived in, and having a car since the early 1960's and so on. This fisher had experienced less affluent periods and was aware that his own father had also but, nevertheless, thought fishing had provided a very good income that was much better than was attainable elsewhere.

While, as detailed in Ch.4, substantial income differentiation amongst the three categories of fishing boat could be identified fishers from all three reported that the fisheries afforded a good standard of living to them and others. While those from the under 40 ft boats earned the lowest incomes they pointed to their

working for only six months in the year and to hidden incomes from fishing as important factors in their assessments. Some indicated that they were also engaged in other income earning activities. Whatever, forby their having the lowest income in the fisheries they still reported considering their incomes to be good. The fishers from this category also reported the success and progress obtainable from fishing as reasons for preferring fishing.

Having encountered periods of financial difficulty arose in many of the fishers responses. As these responses indicated that they regarded that the good times outweighed the bad ones this awareness of cyclic tendencies in the fisheries is important for understanding the subjects' orientation to fishing and its social organization. This awareness offers an explanation of fishers persistence in the fisheries throughout more arduous periods and their investment strategy as, where the good times are seen as surpassing the bad ones, it encourages a longer term investment perspective and greater tenacity. Such a perspective, reinforced where the alternatives are seen as not equaling fishing in all its desired aspects, brings the expectation of better times coming while encouraging preparation for bad times during better ones. Such, appears in a reply from a skipper of a mid-range boat:

> "It has been very good for me.... It has been in the near past, what the future holds I don't know. There was a time when I got a big upsurge in affluence. Maybe it makes you a bit greedier to want more. In that way everybody should be affluent. The effect of this in recent times wants a rethink though, but, with this woman [Thatcher,then Prime Minister] power I don't think that there is any chance of that. She has no sense of conservation at all, none at all...."

This fisher thought fishing had provided a very good income and standard of living, especially in the recent past, for fishers and this is what he <u>desires</u> of fishing. The effects of this were seen to be both, positive, in making fishers affluent and inspiring more effort and investment, and negative in producing overcapacity in the fisheries. The affluence, though, was not considered to be necessarily endless. In fact there were signs of threat to it in which demanded sound and practical conservation policies to ensure

the prosperity of fishing, but he considered that there was not much hope of this with a government then which expressed itself committed to a philosophy of the free market and minimal state.

To probe the issue a little further the subjects were also asked to rank their and other fishers and skippers position in general class terms; as either working, middle or upper middle class. Overall the response to this question was that they thought themselves working class in terms of the work that they did, as fishing involved working with their hands in often difficult hazardous conditions. In income terms, though, over 90% thought they and other fishers were earning middle class, not working class, incomes. This assessment was common for both themselves and other fishers, regardless of their occupational or ownership position, and the whether the assessment was of share owners or non-shareowners, skippers or deckhands.

Overall, the fisher subjects perceptions of the incomes that the fisheries offered them and other fishers were that they were, regardless of the immediate and long term fluctuations in the fisheries, very good. They thought that the period from the mid to late 1960's until the time of interview had been an exceptionally good one for them in incomes and improving living standards. Their awareness of the tendency to fluctuating cycles of the fisheries, as well as immediate variations among trips, led to a long term perspective appearing in their responses. Some, though, expressed caution regarding the future prospects for their incomes; those interviewed in the second phase of fieldwork pointed to a looming ecological crisis which had the potential to impair their incomes.

The Respondents' Occupational and Ownership Ambitions.

In both economic and sociological theory of the development of organizations of production a crucial role is ascribed to the people practicing the activity as a source of the development of processes. In sociological theory these are sometimes described as processes of differentiation; that some of these producers become

more adept and better than others and progressively overtake them while becoming richer and bigger in the process. The producers' ambitions and their perception of their prospects for them are significant for explaining the lack of development expected by sociological theories of production processes. Forby this the occupational and ownership ambitions of the producers are also important for assessing the facet of success and progress.

The subjects were asked if they had any qualifications and what were their reasons for obtaining these qualifications. Those that were skippers and/or share owners in a vessel were asked to explain why and how they became skippers and/or obtained shares in a fishing boat. Those qualified to be skippers who were fishing as deckhands were asked their reason for this. Unqualified deckhands and non-share owning crew were asked if they had any ambition to obtain qualifications and/or shares and if so what their ambitions were and what they were planning and/or doing to achieve their goals. Share owners and aspiring share owners were asked if they wanted to, or had any aspirations to have shares in, or own, more than one boat. There was a question, also, asking how many boats that the person had any aspirations to own or own shares in.

All of the fishers,deckhands and skippers in all classes of boat, who had trained and obtained either certification as skipper or the equivalent of it, explained their reasons for doing so were to own and be skippers of their own fishing boats. That was their reason for forgoing what they would have earned otherwise during training and paying the training costs. Some who did so attained their ambition and were then skippers. Some who did so and who attained their ambition later returned to being deckhands; they explained this as due to their unwillingness and/or inability to meet the responsibilities of being a share owning skipper. Some had not obtained a skippers ticket but, nevertheless, worked as skippers. They explained their lack of qualifications in terms of their not needing them. Those who had not and did not want to train for certification as skipper and who had not worked as

skipper said this as due to the financial obstacles to becoming share owning skippers, the responsibilities of that occupational and ownership position and their own life cycle situation.

The fishers aiming to study for certification as skipper in the future, the fishers certified as skipper and who were or were not working at that at the time of their interview explained their reasons for doing or wanting to do this in terms of their desire to obtain shares in or ownership of a fishing boat. A skipper from a mid-range vessel explained obtaining certification in terms of admiration for good skippers and a need for ambition:

> "If you try and improve yourself you quickly realize that you need to become more in fishing and to do that you need to become a skipper. You need to get a skipper's ticket to get on. Why do you need to become a skipper? It's ambition, I suppose. When I left school at sixteen our heroes were the other guys who were the best skippers and who had the best boats. I just wanted to be like them."

This skipper wanted to try to improve himself in fishing because his school days heroes were the successful skippers, who were the ones with the best boats. Despite his father and uncle having been share owning skippers and their leaving fishing, due to their religious beliefs when the church ordered nightly attendance of services, this fisher studied to obtain a skipper's certificate in order to start from scratch to become successful in fulfilling the responsibilities and enjoying the experiences of skipper. The fisher's father contributed to this positive model of a successful skipper only to quit fishing just prior to this skipper leaving school and entering fishing. This was further evidence of the waning of religious beliefs; what had been strong in earlier generations, when fishing was more perilous, was being supplanted by fishing practicalities. Regardless of his immediate elder kin's membership of the Exclusive, Closed, Brethren, he was neither a member or attender of any church. The reasons he gave for studying for certification were typical of most other fishers who reported doing so; they did so because they admired and wanted to become share or boat owning skippers and get on. They had an image of the successful skipper and a clear idea of how to emulate one.

Deckhands who did not want to be skippers, either now or in the foreseeable future, cited the responsibility and the cost of attaining the post. They cited the responsibility for the safety of the boat and crew, for the decisions where and when to fish and for the financial viability and reproduction of the vessel. All of these responsibilities were explained by those not wanting to become skippers as potentially excessively burdensome. Those who were qualified and who had worked as share owning skippers before but who neither worked as skippers nor had shares in a boat and who did not want to work as skippers full time or to own shares cited aspects of their past experience to explain their current position and ambition. Experiences related to the responsibilities of the occupational or ownership position were cited. A deckhand from a mid-range boat acquired a skipper's ticket because:

> "I had the intention of owning my own boat and to do that it is a good idea to have a skippers ticket...."

When asked what he had been doing to attain this, he replied:

> "No.... I had a share before, two years ago in a 78 ft boat. There were three owners who all had equal shares. They were all members of the crew. But there was too much responsibility to being a share owning skipper. There was too much responsibility for the decisions of the fishing, the vessel and the crew...."

When this fisher was asked which occupational post was preferred:

> "....Deckhand and skipper. I was a skipper for two years on my own boat but gave that up. Now I am a deckhand and work on and off as a relief skipper...."

The responsibilities of being a shareowning skipper were the reasons why this fisher returned to being a deckhand after being a shareowning skipper. After all, the responsibility of relief skipper remained a sought after experience. These reasons were also advanced by another qualified skipper who had worked as a shareowning skipper earlier but who then worked as a non-share owning deckhand; the combination of the responsibilities of the occupational and ownership position were the reasons given for the decision to sell the shares and return to being a deckhand.

More can be seen from the following reply of a deckhand from a mid-range boat when asked to explain why complete ownership

of, rather than shares in, a boat was his ambition:

> "....Being a sole owner is best. That gives you complete control over the vessel...."

However, there was some discrepancy in the reply; this deckhand had no qualifications to be a skipper and while neither this nor the lack of intention to become qualified did not necessarily exclude this fisher from becoming a skipper, as the fishers who were unqualified but working as skippers noted above attests, his lack of any clear activity or plans to attain this stated end did exclude this fisher from becoming a sole owning skipper. The reasons that the fisher gave for not pursuing any strategy or having any clear plans to do so were the financial obstacles to becoming a sole owner and skipper and the responsibilities of being sole boat owning skipper. At best this fisher's attitude could be described as ambivalent.

The next deckhand, from a mid-range vessel, focused clearly on the financial obstacles to becoming a share owner in the reply to being asked why he did not want any shares in a boat:

> "I dinny ken... In the right boat maybe. In the right boat, yes, I suppose so, but not really."

When asked to explain further what he meant he said:

> "Because you need a lot of money and your bairns need to come first, they come first all the time.... Also, being a skipper is not easy.... I don't know if I really want that."

Obtaining a skipper's ticket and shares in, or ownership of, a boat presents obstacles to be overcome for their attainment. Also, there are stages in a person's life cycle when it is less easy for them to surmount these obstacle and both of these fishers were at that stage; both were in their early thirties with young children and were therefore less freely placed to forgo the earnings that training entailed and/or to invest in a boat than someone younger without responsibilities for immediate relatives. The substance of these obstacles increases with the vessel's size and newness, the proportion of share desired and the type of fishing that they plan to pursue. Equally, though, there are routes to obtaining these goals which incur greater or lesser pressures on, and requirements

of, the fisher. One way to ease this is by having a share owning skipper as a father, neither of these fishers had such a father. The preference that both these fishers expressed was for fishing and the experiences of their current positions. Together, their life cycle positions the obstacles to obtaining certification and/ or shares in a boat, the responsibilities of skipper share owner and the degree that the facets of their orientation were obtained in their current position, without additional responsibilities, explains why they did not want to become share owning skippers.

Those respondents who owned any shares in the fishing boat they sailed on were asked if they had or wanted shares in and/or complete ownership of any more boats. Those who reported ambitions for share ownership were asked how many boats they wanted shares in. Their answers indicated that these fishers with shares or share ambitions wanted to restrict their ownership to a single vessel. Some reported that they would consider extending share ownership beyond this to help either a relative, usually a son, or another fisher to achieve their ambition to own a boat. Some said they would consider taking shares in <u>one</u> other boat to their first where both worked as a pair team and they had knowledge of and influence over the other boat. None would consider extending their share ownership beyond this limited range of vessels because they would have no intimate knowledge of, and consequently no influence over or credit for the successes of the operation of any other boats. It would be ownership with liability without control and only extra income if the boat competing with them was successful. Every share owning fisher interviewed reported that ownership of shares in many vessels was an absurd proposition.

Looking first at those fishers who reported having shares in more than one vessel there were two skippers who owned shares in three boats with their immediate kin whose brother was the skipper on the third boat, and three skippers who owned shares in two boats. Both of the former explained that their father had been a share owning skipper who sponsored it thus by using the success

of his own and the subsequent joint owned boat of the older son to finance the next boat so that each of his three sons could be share owning skippers. One of the three who owned shares in two boats owned both, one outright, another owned both in share with their brother and the last a minority share in another boat of a pair team. Forby the current level of share ownership of all these fishers with shares in more than one boat the reply they gave regarding ownership in multiple vessels was that they did not want shares in any more vessels than they currently had. Only to assist another, younger, fisher to get themselves started and established as independent share or boat owners fisheries would they at all consider temporarily taking shares in <u>any</u> additional vessels.

The skipper who owned two boats when asked whether he had any ambitions or desire to own any more vessels replied:

> "You are joking!! You've got to be joking,aren't you? The way interest rates are going. Not only that, I still have control over my boats. I wouldn't want to own a boat or have a big share in a boat where I was not in control and where I did not know what was going on...."

This skipper replied with an incredulity typical of fishers when answering this question. This skipper had studied for a skipper's ticket and obtained a skipper's berth on one of the few boats owned outright by the fish selling agencies from which he managed to accumulate start capital and, with assistance from another shore company, came to own a first boat outright and was aiming to repeat this success in a second. Such a fisher, with an optimal experience of working for a shore company, should be expected to be the most favorably disposed to either such or multiple vessel ownership. Despite and because of managing to be a successful skipper on a shore owned vessel this skipper did not want to own any more vessels. This skipper attributed past success to personal skills as an adventurous, risk taking, fisher working intimately with a good, like, crew. Thus, the skipper did not want shares in a boat where he understood that he could not initiate and control the risks taken for a boat operating under the command of another skipper far away, in unknowable fishing and sailing circumstances.

Without such knowledge the skipper could not operate a vessel for which he would have substantial financial responsibilities. Unable to work with a crew that the skipper knew with some intimacy and to initiate calculated risks this skipper did not want to own shares in any more boats. The only circumstances that this would be considered for would be to help someone to become established. Also, given the ambitions to become a share owning skipper that this fisher had advanced for studying for a skipper's ticket and taking a post on a craft owned by a shore company, the expectation was that all good skippers would have ambitions to use their position to become independent share owning skippers. Successful skippers were seen as necessarily independent and ambitious, otherwise they would not be good, successful, skippers.

A skipper with shares in one mid-range boat that he worked on explained studying for a skipper's certificate:

> "To get on, ambition. Why are you studying? Well it's the same thing. Without a skipper's ticket you can't get a skipper's job that's why. You want to put your heart into it and want to get on, want to get a boat.... If you have a job that's worth doing then you should do it well and get on. Some folks don't have that attitude, they are not ambitious. I am...."

Thus, studying for a skipper's certificate was necessary because having a good job required doing that job well, partly by being ambitious. Thus, fishing was seen as that good job that entailed striving to be successful and achieve progress in and through. What were the extent of these ambitions: would he like to own, or own shares in, more boats:

> "No!"

Why not, if ambition is necessary:

> "No way, I've enough problems with myself. If I had anymore money I would put it into my own boat to improve it. I wouldn't be dependent on anybody else.... I don't want to be able to blame anybody else if anything goes wrong. Just now if anything goes wrong it's my fault, no one else's. I'm in control and I'm responsible. That's the way I want it...."

Ownership ambitions were limited by the ability to exert control over the boat(s) the fisher owned or had shares in. Being in control brought merit when the fishing was successful and progress could be seen in the maintenance and outfitting of the vessel and

a loss of self and social esteem when the fishing was unsuccessful and/or a mistake was made. Ownership of more than one fishing boat brought no ability to control the activities of the other boats. Yet, this skipper understood the merit of success and the odium of failure passed to the fishers operating that boat while, as owner, he retained substantial responsibility for boats over which he had very little influence; this limited his share ownership ambitions to a single boat. Rather than extend ownership beyond the limits of informed control he preferred to reinvest in his current boat.

Those fisher subjects with shares in a boat or boats did not want to extend this ownership in boats any further. Only to assist another, younger, fisher get started and become established as an independent share or boat owning fishers would they consider taking shares in an additional boat to those they had shares in.

Such an understanding of the need to be intimately aware of the circumstances of fishing to be able to operate the vessel successfully and take calculated risks and of the ambitions of skippers was common to all of the fishers either with, or with ambitions for to own, shares in one or more boats that were interviewed. Such an understanding constrained their expressed ambitions, in order of priority, to first shares in a single boat, second, to assist their children or another, especially younger, fisher to become established as an independent shareowning skipper and, last, to own shares in one other boat to operate as a pair team. The emphasis of their explanation for wanting to obtain skippers' qualifications and of the extent and limitation of their share ownership ambitions reveal a strong preference for fisher owned and operated boats among these fishers. They understood that multiple vessel ownership would bring further and substantial responsibility without the informed ability to exert sufficient control over important spheres of activity of any of these other boats. The replies of both the actual and aspiring share owning fishers also indicate that they understood the success of the boat depended on the skills and flexible motivation of all the crew and

the distribution of the boat's income according to the shared risks of its crew and owners. They considered that using their skills as informed share owning skippers or fishers working in coordination with other crew members was what explained and guaranteed the success and progress of the vessel and themselves. They considered that the fishing was the broad set of experiences, detailed in their orientation, of fishing, which could not be obtained by proxy through second or multiple boat ownership.[3]

Focusing on those with shares or ambitions to have shares provides the optimal insight into the thinking of those who are best placed to become the increasingly differentiated fishers who form the basis for multiple ownership. Such, a focusing shows that they are ill disposed to extensive share ownership in more than two or at most three vessels. This is far from providing the basis for an extended, single or company owned fleet of fishing vessels.

Conclusion.

This chapter began by considering the fisher respondents' assessments of the fairness and efficacy of the share system in distributing the income attained for the catch. All of these fishers reported that they considered the system was the fairest for fishers and owners and the most efficacious for the operation and reproduction of the vessel. In expressing this they revealed opposition to large company ownership of boats and any form of a wage system, explaining that the company trawl fleets had failed because they had such an ownership structure and system of income distribution. Some, however, suggested that some modification in the balance of the distribution in the system was impending, but this had not been carried out on their boat and they were doubtful as to the practicality of it in the near future. This doubt, their suggesting other methods to overcome the problems in the fishery without mentioning alteration of the share system and their opposition to big company ownership favours the continued use of the share system among the fishers.

The respondents also assessed the incomes that they achieved in the past and the present from fishing and they all reported that they thought these incomes to be generally very good. They thought that their incomes had allowed them a good standard of living that had progressively increased and was comparatively better than the incomes of many others who were better qualified.

Lastly, these fishers, in explaining their qualificational, occupational and ownership attainment and ambitions expressed a strong support for small scale fisher ownership of vessels and strong opposition to the restructuring of fishery into large company ownership of multiple vessels paying the fishers a wage. They themselves had no ambition to extend their share ownership much beyond a single vessel, explaining this in terms of the practicalities of fishing at sea which required skilled and knowledgeable fishers who could exercise their freedom in pursuit of fish on a boat, for which they had responsibility, that they could exercise some control over. They attributed their success to their ability to attain and exercise their orientation and expected other fishers to be similarly oriented which meant they would have to give over control of their boat(s) to another and sustain the responsibility of the investment without the breadth of attainment contained in their orientation.

Footnotes.

(1) These pressures were understood by these fishers as coming from a number of sources simultaneously. First, they had noted a deterioration in the quantity and quality of the fish they were catching and a drop in their price, which they argued was also due to increased imports from Iceland. Second, there were severe cuts in the harvest quotas for basic species for the fishers impending then. Third, the interest rate was moving upwards as were fuel and maintenance costs. The combination of the first and the rest were thought to be quite crippling; the shortage of good quality fish and a decline in the price they were fetching simultaneously with the rest was thought to be potentially overburdening.
(2) The fisher subjects' reports of their evaluation of the share system also confirmed that they consider the Scottish Fisheries to be composed of many, independent, fisher owned and operated boats. They also indicate some diffusion of authority throughout the crew as well as a concentration of authority and responsibility in the position of skipper owner.
(3) Fish selling agencies shares are low as mostly are the assistance shares and shore family shares in the boats.

Chapter 11. Regulating Fishing Activity.

Introduction.

As was pointed out in chapter 3 it is sometimes argued that state intervention, support, accounts for the persistence of the relatively inefficient small production. The relative decline of large scale trawler fleets was sometimes laid at the door of state intervention and, specifically for Britain, of the introduction and expansion of the Economic Exclusion Zones.(See chapter 2) In this chapter the effect of the introduction of the Economic Exclusion Zones for the Scottish Fisheries and fisheries regulation will be reviewed. The processes and effect of entry into European Economic Community will be considered. It will be argued that the fisheries were not a minor issue in the negotiation process and that the introduction of the Common Fisheries Policy had contradictory consequences which led to something of an ecological crisis in the fisheries at the time of this research.

The State of Fishing Regulation.

The Icelandic and Norwegian extensions of their territorial waters for fishing and mineral rights confirmed a process which converted the fisheries from an internationally free access common property resource into what is usually termed a fishery management problem, and one that was national ('supra-national' in the case of the EEC). Fisheries were converted into a resource that had to be conserved and the allowable catch distributed among the operating fishers.

Iceland first extended their territorial limits from 3 to 4

miles in 1952 and then from 4 to 12 miles in 1958. Iceland's second extension resulted in the first cod war with Britain and an agreement between the two countries which accepted the extension in 1961. The conflict itself was instigated at the behest of the trawling companies who operated in the middle and distant waters and was contrary to the interests of the inshore fleet. The inshore fleet would have benefited from the extension of the territorial sovereignty which limited the access of the vessels of other countries to the extended area. This particular extension itself only marginally relocated the areas where different portions of the catch were made (Tunstall 1963) but the implications of the unilateral extension alarmed companies who had shown little imagination or prudence in their operation. Indeed, the extension was soon mimicked by other European countries with fishing interests and further by Iceland, after much forewarning, in 1975 and Norway in 1977.

The second extension of the limit by Iceland and Norway dealt a heavy blow to the company owned sector who had not prepared for it. The second extension was a ludicrous replay of the first with Britain again entering a cod war with Iceland at the insistence of the distant water fleet. In 1973 the total UK fish catch was 10487000 tonne, of this 64% came from within the UK 200 mile zone, .2% from the 200 mile zone of other EEC countries and 36% from the zones of other countries. The distant water ports of Hull and Grimsby accounted for 29% of the UK total that came from the zones of countries other than EEC ones. While the company fleets from these ports entered the most dramatic decline those of Aberdeen,whose boats had always fished in near and middle distance waters most of which were inside what would be an EEC 200 mile zone,[1] entered decline only a little later. In 1970 there were 103 companies employing 1031 fishers operating out of Aberdeen, in 1980 there were 30 employing 600 fishers. In 1976 there were 116,339 tonne of fish being landed in Aberdeen in 1979 there were 50625 tonne. Even in

the trawling ports with companies whose grounds of operation were most suited to adaptation by relocating their activities and reinvesting in more modern vessels the decline and demise of the concentrated company fleets that are supposedly more rationalized and equipped with resources to adapt was soon complete. The fleet that did was the small scale fleet on the East coast of Scotland who expanded capacity.

Before long Britain was accepting and copying the extension of the limits along with the other EEC countries in 1976 and with this the question of an efficiently harvested, managed and conserved fisheries came to the fore in such a way as to cause the EEC commission to re-examine, and the countries of the community to re-negotiate, the fisheries agreement that took so long formulating during the 1970 enlargement negotiations.

The Ecological Deep End.

The fishery ecological issue may have gained in poignancy in recent time but sensitivity that fish stocks were not limitless relative to the catching capacity of fishers long preceded this. A sense that fish stocks might not be inexhaustible led to the creation of the ICES and the North East Atlantic Fisheries Convention in 1963 to make recommendations on fishing levels and methods.[2] The international constitution of these conventions points to the international nature of the problem which ensues from the fact that the fish migrate through various national sovereignties and that they are harvested by fishers from many nations. Fishers have harvested fish from within seas bordering both their own and other nations. The issue of fish conservation is a problematic international one that involves difficult questions concerning the total allowable catch conducive to the conservation levels of species,of the allocation of this catch amongst nations and fishers, of species to be allowed to be harvested and where and by what means and techniques.

Despite their sensitivity to these conservation questions

European governments' policies have tended to be contradictory. This was due to inadequate knowledge of fish stocks, behaviours and reproduction, the dependency of some on fishing, the electoral clout of some fishing constituencies, the immense cost and difficulties of policing controls, the difficulty of imposing controls which are applicable only to specific species when many fish species cohabit and catches are mixed, the complexity of negotiations between nations which become bargains including non-fishing issues and much more besides. The contradictory policies and actions of the EEC have brought the European, and necessarily the Scottish, fisheries to their current crisis point.

The Scottish fisheries have long been located within a European dimension in its common operating environment and harvest of stocks long before Britain entered the EEC. It is not true to say that the fisheries were a minor part of the process of negotiating entry into the common market in 1970. Indeed, one British member of parliament enquired, was entry going to be prevented over a few tiddlers. The British Fishery, itself, was split over their desired outcome of the negotiations on a fishery policy. The company trawl sector wanted free community access to all grounds as this would retain their access to the Scandinavian waters, since Norway was also negotiating entry. In contrast the inshore sector hotly opposed entry and, at the minimum, wanted other community vessels to be excluded from a 12 mile inshore zone around Britain. After lengthy negotiations, amongst the then existing member nations and those applying for entry, a temporary policy was adopted to prevent the issue obstructing the expansion of the community.

The consequences of not being able to formulate an adequate international conservation policy before the 1960s or earlier than the EEC have done have put the Scottish fishers in a very precarious position of which they are participant authors. The initial agreement on fisheries for extending membership of the EEC in 1970 made no reference to fish conservation, conservation

only became an issue for the EEC with the extension of the Economic Exclusion Zones. This brought out the tension between the principle of communitaire, whereby all nationals had equal access within the community, and dividing fish quotas amongst nations. The interim agreement managed to distribute quotas but being based on each nation's historical fishing practice it was not especially conservation oriented. While it did extend funds to compensate for the decommissioning of vessels out of fishing it also advanced funds which increased the capacity of the fleets. Grants and loans were made available to assist fishers to either buy new vessels or improve their existing vessels and equipment. A prerequisite for the payment of these EEC funds was that there must be at least some grant coming from the fisher's nation state before EEC money was paid. It is the issue of conservation and the inability of governments to deal with it without restricting the technological development of fishing methods, which are essential for the fisher's safety as well as for their efficiency, that is threatening future of the Scottish Fishing Industry. It is this unresolved question, more than the so far unfulfilled, if not contradicted, developments of a capitalist dynamic which is threatening the social organization of the Scottish Fisheries.

The Common Fisheries Policy was not adopted until January 1983. In essence the Policy included the formation of Total Allowable Catches for each species fished guided by scientific recommendation, the zonal distribution of these catches among nations in the form of quotas (which are not national quotas), the formation of producer organizations to distribute the quotas amongst fishers[3] and administer their operation, a minimum price for each commercial species caught, again administered by the producer organizations, grants and loans were made available for fishers to improve existing vessels and equipment or buy new ones and there were funds made available to compensate fishers decommissioning vessels. The policy made provision for controlling

the minimum size of each species that could be landed and the fishing areas and methods for, i.e., net sizes and forms etc. The policy also required the registration and licensing of fishing boats, the formation of a data base of each Community member's fishing activities and, lastly, it set targets to reduce total tonnage and power of the Community fleet. Simultaneously, the policy was moving the fisheries in opposite directions by promoting the development of their efficiency and trying to curtail their capacity and operation.

This was the situation as it stood at the beginning of the study. Although, in 1986 a moratorium was placed on the payment of all grants for the construction or improvement of fishing vessels, with the exception of vessels lost at sea, which still has not been lifted in 1991. Assistance was available from other indirect sources such as governments in other countries were willing to pay a percentage of the cost for boats built there. However, some fishers had found ways round this problem with the help of the fish selling companies and others through setting up a company in joint partnership to get money from the business expansion scheme for boat building. The system worked also by forming a business consortium with shore financiers who took no returns from the investment for 5 years after which the fishers bought out the shore partners who had gained tax advantages by this. There was a firm of lawyers who specialized in getting investment loans from countries with lower interest rates than in prevailed Britain, a strategy which depended on a stable or rising exchange rate relative to other countries. Some of the strategies to obtain financing, such as these, exaggerated the number of vessels registered as wholly company, rather than individually, fisher owned in the register of shipping.

The fish selling agencies also had a long history of investing in boats either by advancing a loan to the fisher boats or by taking a minority share in a boat to participate in buying or improving it which personal communications indicated that they

were still doing. Personal communication with the managers of two fish selling agencies, with key personal in two of the fish producer organizations in the North East of Scotland, an officer with the Sea Fish Industry Association who processed the grant applications, with Bob Allen of the Fishermen's Federation in Aberdeen agreed that the fish selling agencies restricted their interests to a minority share and owned a small number of boats that they fell heir to through the venture's business collapse. The source of this evidence is authoritative and it concurs with previous reports but it is not categoric proof. The banks were also advancing money loans to fishers, although this incurred interest repayments. I interviewed two bank managers with two of the main lending banks for fishers in Peterhead. These managers were responsible for making the decisions on advancing loans to fishers. They indicated a general willingness to advance money to fishers, but they believed themselves to have less influence with the fishers than they had with similar sized shore enterprises regarding repayment and further advancements, especially if they wanted to retain the fisher's custom. Both reported that the fishers phoned them at home with proposals and expected positive decisions within hours, before the next trip. One reported having two sets of criteria for deciding whether to advance cash to a fisher. If the person was a good fisher the money would be given, whether or not the person was perceived as good at business because help could be given in that sphere. But if the person was a bad fisher the money would not be advanced even if they were good at business. He reported that this criterion was generally adopted in the fisheries and was applied by other branches of the bank as it was by the fish selling agencies. This practice explained why some skippers who had gone bankrupt were quickly re-financed to start again; they were good fishers who were not so good at business. Both managers had fishing backgrounds and at least one was a frustrated fisher. These reports conformed with the sorts of relationships between the banks and fish selling

agencies and the fishers reported by Thompson et al., and noted above. It also accords with the separation between the harvesting sector and the fish processing sector noted by Deas (1981).

While the grants and loans were available the fishers in the inshore share sector made use of them to renew and develop their vessels and equipment. When the grant and loans were suspended the fishers expanded their use of the existing and operant structures of finance and utilized some ingenuity to evade the restrictions. More reliance on commercial sources also incurs increased costs through the greater interest burden. The fishers interviewed for the study all reported that they thought this manageable and not overburdening for their vessels. However, what did become a major issue of concern was the series of developments that began to unfold in the latter part of 1988, the middle period of the study. These were seen by some of the fishers as the main trouble source.

In this period there were two developments; one, the quantity and the quality of the fish being caught diminished and the price attained for the fish was reported to be significantly down. The price rose again in 1989 and 1990[4] when, although the volume of official landings were down their value was up. Second, the quotas for the major demersal species were drastically reduced for the year 1989; the quota for haddock was reduced by 62% and that for cod by 23%[5] and there was the first hint that the minimum mesh sizes for these species would increase from 80 to 90 or 120mm. The first, posed a threat to the then present prosperity and financial situation of the fishers in general. The fishers own reports for this study mostly attributed their lower quantity and quality catches to overfishing and the absence of an effectively researched, designed and monitored conservation policy for the fisheries. The second, a response to the apparently diminishing stocks was not necessarily either an immediate or a long term solution to the conservation problem. The efficacy of quotas, in this respect, was reduced by the fishers operating in a market context and having developed a capacity that befitted

the quota levels set by the EEC in the mid-1970s and later. The fishers response to the quotas in this situation was to augment their rate of discard of undersized or lower grade fish in order to selectively increase the quality and landing price of their catch. Quotas also inversely generate 'black fish'; the lower the quota the more 'black fish' that are landed, i.e., fish illegally landed outside of quota control and recording. There is some evidence that the fishers are landing more and more black fish as the quotas became tighter. In the long run quotas are counter-productive for conservation in a 'competitive' fishery, especially where the fishers do not consider them efficacious, because of the 'free rider' problem. Quotas increase both the fishing effort and the practices developed to evade controls. Confirmation of their counter-productiveness was provided with the introduction of the tie up rule, whereby fishing vessels were required to tie up in port for a specific period (10 or 8 days) continuously per month to reduce fishing effort. Further confirmation of their counter-productivity was provided at the end of 1990 when the ICES fishery scientists declined to recommend quotas for the major white species for the grounds off either the West coast of Scotland or the North Sea. The problems inherent in the total allowable catch and the quotas were very much a part of the fishers discussions concerning their vision of the future prospects for the fisheries. It is interesting to note that the herring fishery was not rejuvenated through quotas, either constant or increasingly severe ones, but by a 5 year moratorium on herring fishery. Of further interest here is that, as was noted above in chapter 2, both the quantity and quality of the fish caught significantly increased after the interruption of fishing activity brought by both world wars. The 'market' was not operating to the long-term benefit of the fisheries; even within the tight internal rational of the market models, where limiting supply raises the price, fishing effort can mortally injure a stock long before unprofitability is reached especially when, as

has been argued here and in other fishery studies, that fishing affords more than financial benefits to its practitioners.

A number of fisheries economics papers developed concepts of the maximum sustainable yield and maximum economic yield. The maximum sustainable yield is the level of harvesting whereby the fish stocks can reproduce themselves. The maximum economic yield is the point where costs equal income. The papers of Gordon (1954) and Scott (1959) pointed out that the gap between these two levels meant that fishers would increase their effort to counter lower harvest quantities and quality to the extent of overfishing the stocks to extinction. These papers inform much of the current thinking on fisheries management. The authors were, however, working in purely economic terms using marginal analysis and within excessively restricted parameters. Some, for example, make the absurd assumption that price remains constant as the supply declines due to over fishing. Two subsequent papers have attempted to extend their analysis by arguing that fishers get more than economic returns from the fisheries. They contend that the contend fishers also enjoy their activity and would subsidize it from other sources in order to continue fishing beyond the purely economic maximum economic yield. (Anderson 1980, Smith 1981) The conclusion from this is that there are even stronger forces pushing towards over-fishing than is indicated in the initial, more limited, economic analysis of fishers' action. An interesting point in Smith's paper is that he terms the extra-economic returns a satisfaction bonus which suggests that the extra-economic returns are not considered a fundamental part of the returns to work in economic theory.[6]

Fishers representatives, the SFF, have also displayed some awareness of the inadequacy of quotas for preserving and replenishing fish stocks. They have been requesting the British Government to implement a decommissioning scheme, which would make fishers eligible for the 70% grant that the EEC has provided for decommissioning, to reduce the fleet's capacity. So

far the British Government has declined, arguing, for one, that only older and less efficient vessels would be withdrawn under this proposal. That is hardly a reason for not introducing decommissioning. Rather, it is one to do so as simultaneously the capacity of the fleet will be reduced and its safety and efficiency proportionately improved.[7] Trying to make the fisheries inefficient does not solve the problem when the basic social form is apparently dynamic in its promoting efficient development. Simultaneously, the fishers in the sample then, and other fishers and fisher's representatives since, have been proposing the modification of the form and size of the various parts of the mesh with the aim of increasing the selectivity of the catch and thus reducing discards and the damage to the stocks. It would seem that many in the fisheries agree that quotas are a coarse and counterproductive tool for controlling fishing effort and reinvigorating fish stocks. It would also seem that the solution is beyond the influence of individual fishers or vessels and that neither the British Government nor the European Commission have as yet, 1991, formulated an adequate regulatory regime and set of policies which will allow the Scottish Fishers to continue to develop their safety and efficiency while protecting the fish stocks of all species. It is this continuing regulatory inadequacy that is threatening the future prosperity and survival of the social organization of the Scottish Fisheries.

Conclusion.

In this chapter the introduction and extension of the Economic Exclusion Zones was considered and their effect on the fisheries. Next, Britain's entry into the EEC was examined and it was argued that the fisheries were not a minor part of the negotiations for entry. The importance of the fisheries in the negotiations, the lack of agreement over the formulating of a sensible fisheries regulatory policy and the tensions generated by the notion of communitaire produced a policy that worked in

contradiction. The policy worked to encourage both a reduction and an increase in the capacities of the European, and the Scottish, fleets simultaneously. The effects of quotas and size restrictions on different fish stocks have been contradictory; they encourage greater selectivity amongst the fishers when they harvest the fish at sea and increase the problem of discards. The recent British Government policy of not issuing even minimal decommissioning grants, which would make the Scottish fishers eligible for EEC ones, is a continuance of that contradiction. It is this inability to properly regulate the fisheries while allowing it to continue in the dynamic of increased efficiency and safety which is the threat to the continued existence of a developing and efficient fisher owned fleet rather than some, so far apparently always in the future, threat from large scale capitalist reorganization of the fisheries.

Footnotes.

(1) The exception were the fish taken from within the waters of the Faroes. Despite the Faroes being only semi-independent of Denmark EEC countries had no access to their grounds.
(2) The commission itself was designed as an attempt to strengthen the effect of the previous convention signed in 1946. (c.f.,Wise 1984 pp.79-82)
(3) There is no legal requirement for any individual fishing boat to be a member of a producer organization,although it seems that the vast majority are.
(4) See Fishing News for reports on the value of fish landings for this period. Especially, 30th November 1990 and May 1991 issues.
(5) These reductions were on the 1988 quota allocation for Britain and not on the actual catch levels for that year, which were lower than the quota allocation. The 1988 quota allowance for haddock was 128,000 tonnes for 1988, the actual catch was 86,000 tonnes. The quota reductions represented a 44% reduction on the actual catch for 1987. These were the reported catch levels; there remains an unknown quantity of fish that were landed and not reported because the vessels had broached their quota.
(6) The problems inherent in the total allowable catch and the quotas that they produce were very much a part of the fishers discussions concerning their vision of the fisheries' future. It is interesting to note that the herring fisheries were not rejuvenated through quotas, either constant or increasingly severe quotas, but by a five year total ban on herring fishery.
(7) The Government has gone some way in this direction with the aggregation rule for fish licences, whereby licenses for new boats are granted where the boat is below the size and power of a boat or boats for which either one or two licences exist. However, such an approach is inadequate and it also raises the cost of renewal.

Chapter 12. Conclusion.
Explaining the Social Organization of the Scottish Fisheries.

This thesis concentrated on the question of the multiple, principally fisher, ownership of individual fishing boats, which dominate the harvesting sector of the Scottish Fisheries, and the absence of company owned fleets of fishing vessels. In chapter 2 the most dynamic and resilient social organization historically in the Scottish Fisheries was shown to be that one where the boats were owned principally by the fishers and the income from their fishing was distributed amongst the crews of the boats and their owners, by some mode of equal shares. This dominant portion of the fleet originated in the North East of Scotland. Chapter 3 revealed that the most productive sector of the fleet, in terms of the size composition of the boats and fish landings, measured in value, was located on the North East Coast of Scotland and that the boats in the Scottish fleet were mostly owned by many individuals rather than many boats being owned by a few companies. Both the history of the harvesting sector of the Scottish fleet and the present structure of operation and ownership contradict the predictions of the main social theories available for explaining them.

There have been basically two approaches to fisher ownership of boats in Scotland; one seen it as a local community affair, the other as a traditional form. This thesis took issue with these views, arguing that this social organization of fishing boats is strong and dynamic and in its dynamism it is more in tune with developments in the wider, contemporary, world than it being either a small community affair or a traditional, moribund, form.

It was argued here that the explanation of small scale

production in fishing lay in the distinct nature of the activity and experience of fishing especially as these were affected by the social organization itself and were seen to contrast with those of the available alternatives. It was argued that the explanation lay also in the nature and quality of the social relationships within which the social organization was located. Evidence for this explanation came from the responses obtained to extensive interviews conducted with 40 fishers in the port of Peterhead, by information obtained from interviews conducted with a number of officials and people connected with the Scottish Fisheries, by the findings of other studies of fishing in Scotland and elsewhere and by the findings of the orientations and other studies of work.

To focus on the question of the lack of company formation and ownership of fleets of multiple vessels the fieldwork was conducted in the most developed part of the fisheries, in terms of a, number, structural composition and technical development of craft, b, the proportional value and weight of fish landed and c, onshore integrated companies and organizations, to provide a hypothesis to answer this question, rather than focus on a lesser developed part of the fisheries. Also, given the crucial location of the fishers, the orientations to work approach was amended to focus sharply on the fishers' perceived opportunities, organizational options and assessments of the fishery.

The orientations approach facilitated interrogation of the fishers' perceptions, expectations, preferences, evaluations of importance, satisfactions, dissatisfactions, career ambitions and understandings of the fishery as it was organized. It facilitated doing this in structured and comparative way; e.g., fishers' assessments, both of the fishery and its social organization, and of the alternative available occupations and social organizations were elicited. The approach enabled the elicitation of fishers' understandings of the social and ecological environment within which they operate, of their perceptions and understandings of that environment, of their hopes and ambitions, and of the role

of the companies and other institutions that they are in some way connected with.

Simultaneously, it was possible to more broadly ground the fishers' reports in the findings of the orientations and other studies. The fishers interviewed reported that the current social organization of the fishery expanded the availability of features found to be sought, but not obtained, of a work situation and to increase the satisfaction from, commitment and motivation to, any work and organization perceived to be providing them in greater quantities by these studies. The orientations approach improved the further grounding of the reports of the fishers interviewed in the findings of satisfaction and other studies conducted on fishers elsewhere in the world which indicated that fishers got more satisfaction from, preferred working on, boats that were fisher owned and operated to boats that were owned individually or in fleets by non-fisher, shore based companies. Consequently, the strength and dynamism of the social organization in the fisheries can be said to be due to the specific features and requirements of fishing, the fishers' stronger motivation and commitment to the fishery as it was organized and the wider social location of the fishing boats.

A review of the orientations literature revealed that, despite looking for a single facet orientation, these studies found that most people revealed a multi-facet orientation, either through their preferences or their satisfactions or dissatisfaction with work. Further, they found that most people tended not to have a compensatory orientation to work, whereby receiving more of one feature reduced the desire for other features that were obtainable at work. In contrast, they discovered that obtaining more of some features tended to increase the desire for more of these others. Consequently, it was argued that fishers were more likely to have a multi-faceted orientation to fishing that was revealed through a variety of questions asking them to report on and evaluate the fisheries. Moreover, such an orientation motivates them towards

improving, not only sustaining, the availability of features thought important of, and their capacities in, fishing.

Indeed, the replies of the fishers interviewed for this study revealed that they had such a multi-faceted orientation and that their commitment and motivation to the fisheries and its social organization was derived from that orientation and maintained by the availability of these features from fishing. This was especially so as they attributed the availability of features to the social organization itself. The orientation of the fishers interviewed was composed of four facets: 1.Success and Progress, 2.Freedom and Responsibility, 3.Variety and Uncertainty, 4.Being at Sea and Interdependence. These facets were composed of features that other studies of work found to be wanted if not obtained of that work and which the fishers interviewed here reported to be more available in the fisheries than anywhere else. They also reported that they considered that this was due also to the way the fishery was socially organized, in contrast to the way that other work available to them was organized. It was this contrast with this alternate work, which included a variety of worthwhile, not demeaning, jobs that helped explain their commitment and motivation to fishing and its organization.

It was this contrast that elicited factors of work behaviour from them which suited better the requirements of fishing than the alternate forms of social organization that it contrasted with could possibly elicit. While some of these facets were found available in studies of other fisheries differently organized the extent of them was not. Also, where fishing was differently organized in Britain it was less successful and dynamic and the crews were shown to be more conflict ridden, both internally, amongst themselves, and externally, between them and the shore owners of the vessels who they worked for and received a wage from. The situation where the boats were majority owned by the fishers working on them and the crew and owners received a share contextualized their fishing efforts better than the system of

company ownership and control of vessels and wage rewards for the risks taken and efforts made by the fishers.

Thus, in chapter 5 the fisher subjects' remembered reasons for becoming fishers and their perceptions of the extent of the occupational opportunity that they faced when leaving school suggested that most had come from a social background associated with fishing, that most perceived that that range of opportunity was constrained and that most had some hands on experience of fishing prior to their leaving school and becoming full time fishers. It suggested that while they thought their occupational opportunities were constrained they were more concerned that the opportunities they had for becoming fishers were equally if not more constrained. It suggested that their social background in fishing, their hands on experience prior to becoming fishers and the constrained occupational opportunity that they faced in both fishing and the alternatives fostered a strong desire in most of the respondents to become fishers. However, this strong urge to become fishers tied many to fishing, due to a lack of alternative training, more firmly than they might otherwise have been.

In the tension in fisher respondents' reports between their likes and dislikes, what they considered important of fishing, and what commits and motivates them to either remaining at or leaving fishing, was revealed. What commits and motivates them in fishing was the availability of the above facets of their orientation and what would reduce their commitment and motivate them to leave would be a combined disruption of these. The reports of the facets are of the availability of factors found wanted, if not obtained, of an occupation in numerous studies of work. Moreover, the depth and extensiveness of their availability was reported to be far greater in the fisheries due, in part, to the social organization of it. The orientations literature reported that there is not a compensatory relationship between factors, whereby more available factors compensate for deficient ones; they spurred a desire for more of the deficient ones. Given the social organization of the

fishing boats the fishers are better placed than those on company owned vessels would be to act to improve on factors experienced deficient. Consequently, there is motivation to continuously work to improve factor availability, which means to improve capacities also since these include a desire for to achieve success and progress, freedom and responsibility. Inspiration to develop, an inspiration relatively absent from the company fleets, derives from imbalance in factor availability, the severe problems at times encountered in fishing and the facets in their orientation. Consequently, the motivation in face of disruption of the availability of facets from fishing, rather than being one to leave, would first be one to strive to reinstate factor availability. Such a motivation is strengthened in the long term by awareness of the variability in fishing performance which is expected to iron out over time and accommodate investment that is impractical in the more immediate term.

Total satisfaction is more logically a source of commitment; these fishers overall reports of their likes and dislikes of fishing, their being happy and consenting for higher children to follow them into fishing, their ambitions for to be successful fisher 10 years hence, and in their revealed and expressed preferences these respondents indicate high levels of total satisfaction to fishing as it was organized.

In explaining what they liked and disliked of fishing and in elaborating on their expressed and revealed preferences the subjects' replies referred to the importance of the social organization for the availability of these features that they obtained from fishing. Indeed, in chapter 10 it was shown that the fisher subjects were strongly committed to the social organization that they considered optimal for them, for the success and reproduction of their vessel and for the general dynamism and success of the Scottish Fisheries itself. They did this through their assessments of the incomes that they obtained and had obtained from fishing, which they considered to be and to have

been very good. They did this through assessing the fairness and effectiveness of the share system of income distribution for the reproduction and success of both their vessels, specifically, and the Scottish fisheries, generally. The subjects interviewed indicated that they thought that the share system was an optimal method of income distribution for both, and that it was certainly better than any wage system could possibly be for both. They did this also in stating their ambitions for shareownership. These ambitions were primarily for shares on the vessel that they would sail on. The only other circumstances where they thought it advisable to have shares in any additional vessels was a, to assist either their relatives or another, usually younger, fisher become similarly established as an independent share owning fisher like themselves and b, where they worked jointly as a pair trawling team. In this, and in their ambitions for obtaining qualifications, they perceived a necessary connection between being the majority share owner and being the skipper of the boat.

They explained the limits of their share owning ambitions in terms of their needing to be informed and in control of the operation of the vessel because they attributed their success as fishers to their skills searching out and capturing the fish and working together as a harmonious and coordinated crew. They attributed their success to their knowledge of and control over the circumstances of the operation and maintenance of their boats. They attributed their success to their independence in such things and were reluctant to let anyone interfere in them. Consequently, they considered that only independent fishers were capable of being successful and that independent fishers would not work for someone else, who would be anxious or eager to influence their fishing and vessel maintenance and renewal, as much as they would for themselves. They thought that good skippers, by definition, would only fish for themselves. Thus, in their share ownership, in the limits of their ownership ambitions and in the explanations that they advanced for these limits the fishers interviewed

exhibited strong support for the social organization, where the boats were majority owned by the fishers on them and the income was distributed by share. They also exhibited a strong enmity and opposition to the idea of either large shore company ownership of, or interference in, the operation of the fishing vessels. In all of these things they revealed a hostility to large company takeover of fishing boats and/or interference in their fishing.

Furthermore, the fish selling agencies who had minority shares in some of the boats, the banks who advanced loans to the fishers and the fish processors who bought the fish that the fishers landed took a similar view of the practical requirements of fishing and of the orientation and intransigent independence of fishers, a view partly informed by the failure of the trawl owned fishing fleets. Thus, they had no inclination to take over ownership of many vessels and preferred to leave ownership and control in the hands of the fishers. They preferred to limit their activities to those that were their first concern. For the fish selling agencies and banks, so long as the fishers working, owning and controlling the boats were successfully catching fish and maintaining financial viability this confirmed their understanding and, indeed they showed no inclination to buy or take over the successful boats and form fleets of them. In these ways they supported rather than threatened the social organization predominant in the Scottish Fisheries.

In conclusion, the explanation of the social organization of the harvesting sector of the Scottish Fisheries proposed is as follows: The solution to the problem of explaining the social organization predominant in the Scottish Fisheries lies in the distinctive nature of the activity and experience of fishing as it is socially organized, in the contrast between the activity and experience of fishing and those of the possible alternative occupations and social organizations, in the orientations of the fishers and in the quality of the social relationships within which that social organization is located. This is especially so

which that social organization is located. This is especially so as the activity and experience of these alternatives and fishing are affected by the social organization itself.

The fish are elusively located in the vast expanse of the changing, demanding and potentially dangerous sea where they roam unbounded. This along with their little known reproduction and migratory patterns and the varying intensity of working aboard a fishing vessel hunting and capturing fish in these conditions composes an inconstant undertaking. Such an undertaking is best executed by a crew who are positively orientated towards fishing and who are independent, adventurous in pursuing the fish, adept and coordinated in working together and flexibly responsive in temporally and physically applying themselves to fishing. Such an undertaking contributes to making fishing more varied and endowed with features which were found wanted, if not available from work, in studies of it, and which were central to the fisher subjects' guiding orientation. The social organization is, as well as the specific nature of the fishing activity, itself a crucial factor affecting the availability of the optimal fishing practices from the crew and of these features desired of work. The social organization predominant in the Scottish Fisheries elicits these practices from the fishers better and enhances and enriches the availability of these features and, in this way, it contributes to its own continuance.

The solution to the problem of the social organization predominant in the Scottish Fisheries lies also in the quality of the social relations within which its embedded. The fishers sell their fish in the local market by auction where there is a minimum intervention price, set by the EEC and administered by the fish producer organization that they are members of. The fish are sold through fish selling agents who take a commission for this and other services that they provide. Other fishers and a fisher's relatives and friends sometimes take minority shares in their boat, lend money to them to become established as share

owning fishers and/or recommend them to others for this purpose. They also do this to assist them improve their craft. The fish selling agents also take minority shares in the boat and lend fishers money to assist them buy or improve their boats. Local banks, fuel suppliers to the boats, some business consortiums, etc., are willing to lend money to successful fishers to buy new boats or improve their old ones. None have shown much enthusiasm to form a large fishing fleet under their ownership and control. While their financial assistance is supportive of the social organization it is, nonetheless, dependent on the fishers' success in fishing, little of it would be given otherwise.

There are other social relationships, relating to the provision of infrastructure such as ports with a market, a transport network, navigation and rescue systems and the social development of knowledge of fish stocks, of their migratory and reproductive patterns and of the means to ensure an efficient, safe and balanced harvesting of the fish, of the design and technology of the fishing boats and their equipment, etc. The social relationships concerned with the social development of knowledge related to the safe and balanced harvesting of fish stocks, to vessel and fishing technologies. etc., and the fishers use of the latest information technology in fishing suggests that the social organization in the Scottish Fisheries has more in common with the more general occurrence of small scale, flexible production, and the central importance of the expansion in socially produced scientific knowledge and information technology than any earlier models of production. Developments that have been variously described under terms such as post-industrialism, post-Fordism, post-modernism, etc. The social organization in the Scottish Fisheries appears to share more with these than with any traditional, stuck and moribund, models of social organization. While some attention is given to these here, and it is argued that the development in the use of modern technology actually enhances the fishers abilities and freedoms

in fishing rather than entraps and ensnares them, actually unravelling the intricacies of post-modern developments and detailing the way the fishers are involved in the forms of social relationships being pointed to in the works addressing them is another thesis which dearly needs to be done.

The main threat to the prosperity of the Scottish Fisheries does not appear to come from the transformation of the social organization effected by either the fishers or by non-fishers associated with fishing. The problem of ensuring an efficient, safe and reproductively balanced harvesting of fish stocks poses the biggest threat. The unbounded migratory movement of fish species makes this a problem of international proportions which needs to be solved through international regulation. Solving this depends on the improvement of knowledge of the reproduction of fish stocks, the development of fishing technologies, e.g., nets to improve their size and species selectivity, of the best means to regulate and control total fishing effort, especially in an internationally agreed and coordinated way that involves the fishers as active participants rather than reluctant subjects, the effect of pollution on fish reproduction,etc. Thus, the final chapter reviewed the growth and development of international fishing regulations.

Appendix I . Fieldwork Diary.

The fieldwork was undertaken in three phases, principally in Peterhead, when 81 people connected with, were interviewed about, the fisheries. To heighten the potential for sensitive material to be reported, full confidentiality was promised all respondents.

The First Phase of the Fieldwork.

This phase was undertaken in Peterhead, primarily, and Aberdeen over 4 weeks in the summer of 1987.

Interviews were obtained with 6 working fishers, 3 of whom fished on 40-100 ft boats, 2 as skippers and 2 as deckhands, 1 as skipper on under 40 ft boats and 1 as a deckhand on an over 100 ft boat, and 4 retired fishers, 2 of whom had fished as skippers and 2 as deckhands on mid-range vessels. These were conducted either on the Peterhead harbour, where I first introduced myself as conducting university research into the Scottish fisheries, or in the Fishermen's Mission beside the harbour, where we could talk over coffee. The retired fishers were especially helpful as they often walked me round the harbour explaining the fishing boats and their gear, the location and nature of fisheries' organizations, introduced me to other people in the fisheries, spoke about their experiences in, and the history of, the fisheries, etc.

Both groups of fishers were asked why and how they became fishers, about how fishers were recruited, the system of ownership of, the command structure on, the system of income distribution used by, their boats and generally in Peterhead. They were also asked whether they thought fishing provided good incomes for them and other fishers, about the connections between the boats and government fishery organizations, banks, fish selling agents, fish buyers, fuel and other suppliers, etc. These interviews were

noted and written up immediately afterwards.

A senior officer of the Sea Fish Industry Authority was interviewed in his office concerning this organization's work in the fisheries. He spoke about the structure of boat ownership in the Scottish fleet, their administering work in both grants and in assisting the design of new boats or improvements for grant aided work and he spoke about the relationships between fishers, especially share owning skippers, and other organizations such as banks and fish selling agencies. The interview lasted 3½ hours.

The Chief Executive of the Scottish Fishermen's Federation, Bob Allan, was interviewed in his office for 4 hours. Mr Allan was asked about the disappearance of the trawl companies and the pattern of boat ownership prevalent in the Scottish fleet, the relationships of dependence/independence between the fishing boats and those who advanced loans, supplied services, bought their catches, the different sectors of the fisheries, the main institutions composing the fisheries, governmental, commercial, non-commercial, etc., the availability of grants and loans for boat construction and improvement, about the manner in which the fishers sold their catches and Government and EEC control of, and financial support for fish sales, the circumstances and efficacy of political representation of the fisheries and the Scottish Fishermens' Federation and, lastly, the effects for this and other aspects of the fisheries of Britain's EEC membership.

A Peterhead Harbour office officer gave information concerning harbour facilities, the support services and companies and the relationship of these to the boats and their owners, the numbers and origins of the boats landing fish at the market, the general ownership patterns of these boats, etc., in a 1 hour interview.

In this period 2 workers in the ice factory, 1 fish seller and 2 fish porters in the Peterhead market, 2 net factory workers and 1 fishing boat painter were also interviewed about the fisheries. All of them were approached on the harbour and interviewed for between 1 to 1½ hours on their relationship to the fisheries, the

principle activities of their companies in the fishery, the pattern of ownership of fishing boats and the share system of income distribution, their historical knowledge of the fishery.

The Second Phase of the Fieldwork.

This phase was undertaken in Peterhead in 3.5 weeks in the summer of 1988 when fishers and more officers from onshore associations servicing the fisheries were interviewed. For 15 fishers contact was established by my approaching them on the harbour, informing them that I was conducting university research on the Scottish fisheries, and asking them for confidential interviews on their life and experience of the fisheries. Although all of the fishers approached thus agreed to be interviewed, 3 of the interviews were interrupted when their boats set sail (after about 1½-2 hours when they had answered between 50 to 65% of the questions). Another 2 fishers were introduced either by an earlier interviewee and 2 more by the retired fishers. Successful interviews were conducted with 16 fishers: 5 were conducted on the harbour (lasting 2½-3 hours), 4 on their vessels (of 3 hours) 5 were commenced on the harbour and concluded in a discrete corner of the Fishermen's Mission (of 2½-3½ hours) and 2 commenced on the harbour and concluded in the fisher's home (4 hours). The replies obtained in incomplete interviews were examined for any disagreement with those from the completed ones; there were none.

All of the fisher interviews in this and the third phase of the fieldwork were conducted to the questionnaire (Appendix Ⅱ.) Their replies, as those of all other respondents, were jotted on a clipboard and fully written upon finishing the interview.

In the second and third fieldwork phases I was introduced to 6 people thought, by those who did so, to be particularly well informed about the fisheries, as someone conducting interviews on fishing who transpired to be retired fishers who I felt obliged, and thought, and found, it not entirely invaluable, to interview.

Interviews in this phase were conducted with two executive officers from the two main Scottish fish producer organizations

in Peterhead, an officer with a fishers' cooperative, a fisheries inspection officer and the executor of the North East Fishermen's Joint Group Training Association. Contact was established either by telephoning or visiting their offices and arranging interviews, conducted there lasting between 2 and 2½ hours. The interviews with these officials began with asking them to explain the nature and functions of their organizations and, if they were responsible for implementing government controls, e.g., producer organizations administered fish quotas, if they were aware of ways in which the controls were subverted. Thereafter, there was a shift in approach to tap the respondents' general knowledge of the fisheries when questions were asked about their knowledge of the ownerships structure and system of income distribution among the fishing vessels and if they knew of any instances of multiple vessel ownership by any individuals or companies. They were also asked of their knowledge of the relationship between the fish selling agents and the boats associated with them; i.e., about the substance of the agencies and others share ownership in vessels, the vessels' loan and other financial relationships.

Shortly after this phase, I met and interviewed 4 fishers on a mid-range vessel in McDuff on their boat and 2 fishers on an under 40 ft boat in Oban. It was decided against using these as insufficient numbers were interviewed from ports other than Peterhead, although their reports were checked for conflict with those of the core group of fishers; there were none.

The Third Phase of the Fieldwork.

This phase was conducted over four months between November 1988 and February 1989 when the method of contacting fishers was modified. While some fishers were still contacted on the harbour, the main method of contact was by noting the boats in the dry dock for repair, locating them in the Peterhead Harbour Handbook, where all the Peterhead boats' skippers' addresses and telephone numbers were listed, and telephoning the skipper to introduce myself as before and ask for an interview. All the skippers thus contacted

agreed to an interview and invited me to their home, often coming to the harbour in their cars to take me there. These interviews lasted 3 to 4 hours and usually ended with an hour or two of conversation about the Scottish fisheries, a time when 2 of these skippers showed me videos they had taken of their vessels fishing at sea, giving detailed explanations of their work procedures.

All of the skippers contacted thus supplied the names and phone numbers of their crew for me to contact, 16 of whom were phoned. None declined to be interviewed, but interviews could be conducted with only 5 as either their boat was due to set sail within 12 hours or they were already at sea. The 5 deckhands contacted through their skippers also invited me to their home for interviews which lasted and average of 3 hours.

From telephoning fishers interviews were completed with 16 fishers; 10 skippers and 6 deckhands. Of the remaining 6 fishers interviewed then, 1 skipper who was interviewed for 4 hours at home was introduced by his brother, detailed below, and 5 were contacted on the harbour; 3 of whom were interviewed in the Fishermen's Mission for 2 ½ hours and 2 drove me to their home where they were interviewed for 3 and 4 hours each.

Interviews were also conducted with two managers responsible for administering loans to fishing boats from the two main banks and two officers similarly responsible for the fishing boats affiliated to two of the main fish selling agencies in Peterhead.

The bankers were contacted by telephone and I explained that I was conducting university research into the Scottish Fisheries and wanted to ask them general questions concerning the services that their banks advanced to the fishers and the criteria that they used in providing services such as loans. Both bankers were asked about the size of the loans that their banks gave to fishing boats, the criteria they used for giving them to fishers, their repayment requirements, how they dealt with boat owners who went bankrupt and asked for a later advance and about the bank's ownership of fishing vessels.

One of the bankers answered all of my questions; as well as those indicated above he answered questions asking how many boats the bank had as clients, how many they advanced loans to and whether they only gave loans to fishers that were their customers, what was the general pattern of ownership among their client boats, what was the maximum and average percentage of shares of these boats owned by shore, especially company, share owners,e.g., fish selling agencies, what were the boat owners relationship to the bank and what he perceived this to be to the fish selling agencies and fish buyers, what was the common method of income distribution used amongst the bank's client boats and what was his assessment of the general solvency of fishing boats and of the standard of living that they provided their fishers. This interview lasted most of the afternoon.

The other banker pleaded client confidentiality and refused to answer all questions. However, he did not terminate the interview despite rejecting several efforts to convince him of the complete confidentiality and unattributable use of his answers. He spoke of his own fishing origins and admiration of fishers. In explaining this he described the ownership structure of vessels in Peterhead, his understanding of the relationship between the fishing boats and the fish selling agencies they were associated with and others who provided them loans, the fierce independence of fishers, hypothetical cases of boats in different financial situations, how fishers came to decide to renew their vessels and sought and obtained grants and loans to do that and what they expected of the bank that dealt with their business. Despite his refusals he gave me pretty much all of the information sought.

The officers of the fish selling agencies were asked about how many boats that the agency owned outright, whether the agency aspired or planned to own a fleet and why, the maximum, minimum and average levels of shares that their company had in its affiliated boats, the company's preferred level of share ownership in a boat and the reasons for this, the services that they

provided the affiliated boats and the forms and levels of charges for them, the nature of the contract of affiliation between the boats and themselves and what would be their response to a skipper who suddenly wanted to change agencies. They were asked if they had experienced skippers terminating their relationship at short notice, how common that they thought this was and what were the typical reasons for it. In all of these questions they were asked how they understood other agencies operated. These officers were interviewed in their offices for just over 2½ hours. Contacted by telephone, they were informed that I was doing university research into the Scottish fisheries and wanted to ask them about their ownership of fishing boats and the nature of the services that they provided fishing boats.

I also interviewed a manager of a firm who supplied fuel oils to fishers and an accountant with a firm servicing the accounts of 45 fishing boats. We regularly met for lunch when they spoke of the fisheries and increasingly candidly of their own work.

Appendix II . The Questionnaire.

(The interview was introduced with promises of complete and absolute confidentiality as I was wanting to ask questions about the ownership and other financial details of the respondent's vessel. These promises were usually found necessary to be repeated during the interview,particularly at the points of question on the ownership and/or where the subject thought the issue a highly confidential one.)

Section 1: Work History and Qualifications.

1. What is your name,please?
   1a. Where do you live?
2. What is your present occupation/position on your boat?
3. How old are you?
4. How old were you when you left school?
5. Did you have any qualifications when you left school?
6. What did you want to do when you were leaving school?
   6a. Why did you want to do that?
   6b. What job did you actually get?
   6c. If the actual job was different from the desired job; Why did you take that job?
7. At the time of your leaving school did you think there were many jobs that you could have chosen from if you had wanted to?
   If yes:
   7a.What sorts of jobs did you think were open to you then?
8. Why did you choose to become a fisher and not something else?
9. Do you have any qualifications now that you have gotten since leaving school?
   If yes:
   9a. What qualifications do you have?
   9b. How did you get them?
   9c. Why did you go to the bother of getting them?

Section 2: Current Situation.

10. Are you a part owner on the vessel that you sail on now?
    If yes:
    10a. Would you mind telling me what your share is?
    10b. How long have you had shares in or owned this boat?
    10c. Did you inherit these shares or any other shares in any other boats?
    If yes:
    10d. How many shares did you inherit?
    10e. Could you tell me who you inherited them from?
    10f. What boats did you inherit them for?
    10g. What was the size of that/those boats?
    10h. Were you involved in the construction of the boat that you now sail on?
11. What is the name of the boat that you currently sail on?
    11a. What type of boat is it?

11b. What is its value?
11c. Is that the current value or the building cost?
11d. What length is it?
11e. What tonnage is it?
11f. What horsepower does it have?

12. How many owners does the boat you sail with have?
12a. Do they all have equal shares?
12b. Are all the owners crew members?
If yes
12c. Would you tell me their position on the boat and what proportion that each person has?
If no:
12d. Would you tell me who the share owners are? (i.e., are they, crew members, relatives, fish selling agents, fishers on other boats, shore companies, banks, etc.)
12e. What percentage of shares does each person own?

13. Do you own or have shares in any other vessels?
If yes to 13 continue to 13a,if no, go to 14.:
13a. How many boats do you own or have shares in?
13b. What is the name of that/each boat?
13c. Will you tell me the proportion of shares that you have in that/those other boat(s)?
13d. Could you tell me who else owns shares in that/those other boats and what proportion each person owns?
13e. What is the current value of that/each boat?
13f. What is the length of that/each boat?
13g. What type of boat is that/each boat and what type of fishing is that/each boat employed in?
13h. Do you ever sail or fish with that/those other boat(s)?
13i. How often and for how long in the year do you sail with each boat that you own or have shares in?
13j. What position do you have on each boat?
13k. Do you want to own or have shares in any more boats?
If yes:
13l. How many boats do you want to own or have shares in?
13m. Could you explain to me why you want to own or have shares in those other boats?
If no:
13o. Why do you not want own or have shares in any other boats?

14. Do you want to own or have shares in a boat in the future?
If yes to this continue to 14a., if no go to 15:
14a. What size and type of boat do you to have shares in?
14b. Is it complete ownership of, or shares in a boat that you want?
14c. Why do you want that?
14d. What are you doing to achieve that?
14e. Would you like to own or have shares in any more boats other than this?
If yes:
14f. How many other boats do you want to own/have shares in?
14g What size of boats do you want to own or have shares in?
14h. Could you explain why you want that?
If no.
14i. Why do you not want to have shares in any more than one vessel?

15. Why do you not want to own or have any shares in a boat?
15a. Have you ever owned shares in any boat in the past?
If yes?
15b. What size and type of boat did you own or have shares in?
15c. How did you obtain these shares?
15d. Would you you please explain to me why you no longer own that boat or those shares?

16. Many of the boats now have elaborate electronics such as navigation equipment, radar, sonar, multiple radio systems, etc., does your boat/do your boats have that sort of equipment?

If yes:
16a. What sort of this equipment is your/each boat equipped with?
If no:
16b. Could you explain why it has none of this equipment?
16c. Many boats have full shelter decks does your boat/boats have this?

Section 3: The Experience of Being a Fisher.

17. Can you describe what you generally do on the way to the fishing grounds?
17a. Can you describe what you basically do when you arrive at the grounds?
17b. Can you describe what you generally do on the way back to port?
18. What, if anything, do you like most about fishing?
19. What, if anything, do you dislike most about fishing?
20. People sometimes express the opinion that they are simply cogs in a bigger machine at work,do you ever feel that?
If yes:
20a. How often would you say that you feel that way; more often than not, 50-50, sometimes, rarely, very rarely?
If no:
20b. You don't even feel that rarely?
Refer back to question 2:
21. You are now a _____,how long have you been doing that for?
21a. What was the occupation/position on a fishing boat that you held before that?
21b. When did you begin doing that?
21c. When did you finish that?
If the answer to 22a was a position on a fishing boat then ask 21d, then after either 22c,or 22d, ask 22a, to recommence the question cycle until the subjects occupational histories are thought exhausted.
21e. Was that on your current boat or another boat/boats? (If more than one boat enquire about the specific time spent on each boat.)
If no alternative work is reported ask;
22. So, you have worked at nothing else other than fishing?
If alternative work is reported ask:
22a. You worked as a _____ what did you think of that?
22b. Why did you finish doing that?
22c. What do you think/imagine working in a factory is/would be like?
22d. What do you think/imagine working in an office is/would be like?
22e: For those with other occupational experience ask:
What occupation would you prefer to choose most from amongst that other one/those others ones that you have had, factory work, office work and fishing?
For those with no other occupational experience ask:
What occupation would you prefer to choose from amongst factory work, office work, any work imaginable and fishing?

For both ask:
22f. Why would you prefer to choose that most?
23. Do you think that the crew on your boat work extremely well, very well, well, not very well or very poorly together as a work unit?
24. Would you think that you work hard at fishing for mostly for yourself or for the crew?
24a. Why would you say that?
24b. Would you say that the crew compete amongst themselves?

24c. If you felt unwell at sea and you could not work as good as you normally do, would you feel that you were letting your crew mates down or would you expect them to understand?

25. Do you think that fishing offers you a very good income or standard of living?

25a. Does fishing provide your only source of income or does it provide about 90,75,50,25% or less of your income?

25b. If less than 100% ask about the other source of their income.

26. People frequently label themselves as either working class, middle class,upper middle class or upper class etc., how would you label yourself in those terms?

26a. How would you label fishers, generally, in these terms?

26b. Why would you say that?

26c. How would you label the skipper/other skippers in these terms?

26d. Why would you say that?

27. Does your boat use the share system for dividing up the income and paying the crew and the boat's owners?

If yes to 27:

27a. Would you explain how the share system is calculated on your boat?

27b. Is that the common method used in the Scottish Fisheries or Peterhead generally?

If no to 27b.:

27c. What is the method commonly used there?

27d. Why does your boat differ from the more common ones there?

If no to 27.:

28. What method does your boat use to pay the crew and distribute the vessel's income?

28a. Is this method used by your boat the common one in the Scottish Fisheries or Peterhead, generally?

If no to 28a.:

28b. What is the method commonly used there?

28c. Why does your boat differ?

29. Do you think the share payment system is the fairest one for paying the crew and distributing the income?

29a. Why do you think that?

29b. Do you think the share system is the most effective and efficient system for the operation of your boat?

29c. Why do you think that?

29d. Do you think that it is the most effective and efficient system for the Scottish Fisheries generally.

29e. Why do you think that?

30. Which ports do you sail from?

30a. Which port do you mostly sail from?

30b. Which ports and markets do you land your catch?

30c. Which port and and market do you mostly land your catch at?

30d. Which port and market do you prefer?

30e. Why do you prefer that port?

31. Many fishers from other ports now fish from and land their catch at Peterhead, do you think that has changed the fishing in any ways

31a. In what ways do you think that it has changed it?

31b. What affect do you think that has had on Peterhead?

31c. Why do you think that?

32. Do you fish over Sunday?

32a. What do you think of Sunday fishing?

32b. Are you a member of any church?

If yes:

32c. Which one are you a member of?

32d. How often do you attend church services, etc.,?

33. How long on average are the fishing trips of your boat?

33a. Is the length of the trip decided upon before you depart or does that depend on factors such as the success of the fishing?

33b. Is it the skipper alone who decides the length of the trip or do other crew members also influence the decision?
33c. Each trip is composed of a sailing to and from the grounds; what is the average minimum and maximum times that you spend actually fishing?
33d. What is the longest time that you have fished continuously for without a break?
33e. Is it common to fish for such continuous and lengthy periods?
33f. Who would decide when to start and stop the fishing?
33g. Do the crew have any influence over this decision?

34. Do you fish all the year round or do you fish for seasons?

If they fish seasons ask:

34a. How long and when are the seasons that you fish for?
34b. Do you fish for different species in each season and if so what species do you fish for?
34c. Are there times in the year when you stop fishing?
34d. How long are these for and what do you do then?
34e. What happens to the boat then?

35. When in the year is any major regular work undertaken on the boat?
35a. Has the boat you are on had any refits or improvements?

If yes:

35b. How many?
35c. Who decided to improve or refit the boat on the last occasion; was it a crew decision, a decision of the share-owners and the skipper or of the skipper alone?
35d. Can you remember whose initial idea that the work was?
35e. If you thought of something or noticed something on another boat, that could improve the performance of the vessel you were on would you suggest that it be adopted?
35f. How much chance do you think there is of your suggestion being adopted?

36. Could you tell me if government grants or loans were obtained to a. build or buy, b. refit or c. improve the boat?
36a. Do you know if it was difficult to get these?
36b. Do you think these grants are good or bad for the Scottish Fisheries?
36c. Why do you think that?
36d. Would you or your boat apply for these grants again?

37. Do you or your boat have any outstanding loans for your vessel and or its equipment?

If yes:

37a. How do you evaluate these; do you consider them overbearing, substantial, medium or light in terms of the demands they make on you or the boat?
37b. Are they a source of worry to you and/or the rest of the crew?
37c. Do you think that these loans influence the operating and fishing decisions of the vessel?

38. Is your boat associated with or a member of any fish selling agency, fish producer organization, coops, fishing associations?
38a. Which ones are the boat associated with?
38b. How long has the boat been associated with these?
38c. Do you think that the boat is ensnared in any way in its relationship with any of these, especially with the fish selling agency?
38d. How easy do you think it would be for your boat to change the fish selling agency that it is contracted to; not very easily, not easily, easily or very easily?

39. Are you a member of the Scottish Fishermens' Federation?
39a. What do you think that the Scottish Fishermens' Federation should be doing for the fisheries?
39b. Do you think that they do this or attempt to do this?
39c. Do you think that they do it adequately?
39d. What do you think of their ability to influence the

Government?

40. Do you think that there is a secure and good future in Fishing?
    40a. Why do you think that?
    40b. What do you think needs to be done to secure a good future for the Scottish Fisheries.

Section 4. Social Background.

41. Was your father a fisher?
    If yes:
    41a. What position did he hold on his boat?
    41b. Are any other of your relatives fishers?
    41c. What positions did they hold on their vessel?
    41d. Are you related to any of your current crew mates?
    41e. Were you related to any crew members of the first boat that you sailed and fished on
    If yes:
    41f. Which ones were you related to?
42. Are you married or single:
    If yes:
    42a. Are your spouse's relatives fishers?
43. Do you have any children?
    If yes:
    43a Would you be happy for them to, or were you happy that they became fishers and why do you think that?
    43a. Are any of them fishers?
    43b. What are there positions on the boat they sail on or occupations?
    If no:
    43c. If you were to have any children in the future would you be happy for them to become fishers and why do you think that?
44. What would you like to be doing in 10 years from now?
45. Can I re-contact you if I want to ask you any more questions.

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